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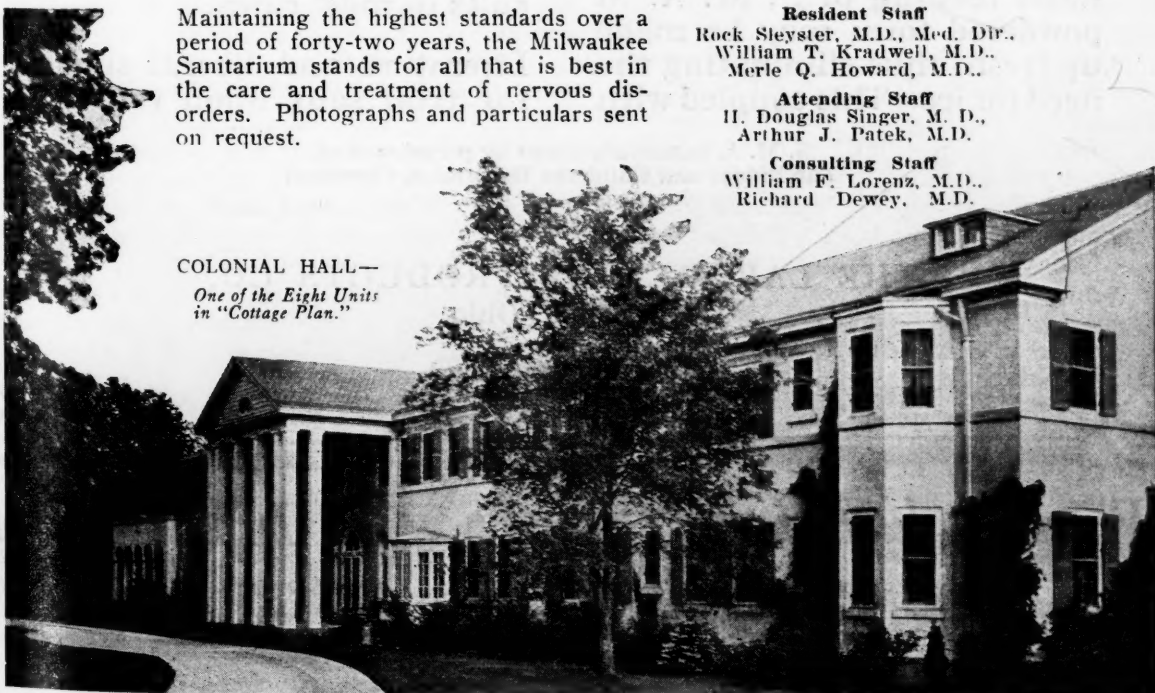
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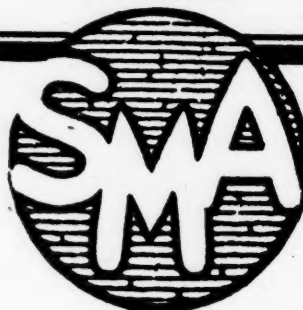
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Vol. XXV.

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No. 7

Original Articles

A BRIEF STORY OF DISEASE*

J. H. DEMPSTER, M. D., F. A. C. P.
DETROIT, MICH.

"Ring Out Old Shapes of Foul Disease"
Tennyson.

Among the primary instincts of man are self-preservation and the desire to perpetuate the species. Self-preservation demands food and shelter; it also involves the struggle against those hidden agents that would tend to destroy the body and to result in death. The importance of disease as an adverse economic agent, has never been adequately determined though it has been often too keenly recognized.

In studying the history of disease we note a greater number of diseases the nearer we approach the present. This is, of course, due to medical discoveries and the development of diagnostic methods. From our viewpoint the importance of disease depends upon our contact either socially or as individuals. Bubonic plague would, therefore, have only an academic rather than a vital interest to the majority of Americans. In a recent survey covering a period of five years made in New York City it was found that in examination of the cases of illness among 133,000 workers, 47 per cent of the illness was due to respiratory disease. We might fairly assume that a survey among workers in Detroit would show similar high incidence of disease affecting the respiratory tract. This finding has been corroborated by Raymond Pearl who has shown that the organs of the human body vary greatly in their efficiency—unlike the one horse shay. He claims that the organs which have advanced least in the course of evolution, such as the alimentary tract, are those which break down most frequently and also that parts of the embryonic structure, which

showed the highest specialization, such as the skin and central nervous system show the greatest ability to withstand the wear and tear of life. Considering the large number of deaths of infants from forms of enteritis, diseases of the respiratory system come first in accounting for classifiable deaths. The heart and blood vessels stand third; the nervous system and sense organs fourth; kidneys and excretory system fifth; primary and secondary sex organs sixth; skeletal and muscular system seventh; skin eighth; and endocrine system last. Again the respiratory and digestive systems are more exposed to direct infection from the air and from foods than any other system of the body, a fact which would also tend to account for greater mortality from this cause.

DISEASE IN PREHISTORIC TIMES

Disease, it is needless to say, began in prehistoric times. It undoubtedly originated in the antagonism between two forms of life and is therefore almost as old as life itself. The visible evidence of disease extends back to the late paleozoic era. During earlier periods animals are said to have been immune. Of course, the farther back we go in Geologic time the scantier and more unreliable are the records in the rocks. It is supposed that early forms of life were practically immune to disease, that the later breaking down of the immunity was due to the development of race senescence. A notable sign of racial senility is undue spinousness, the tendency to produce excessive spines, bones, or other hard or hairy materials. Some animals such as the Irish stag or elk have become extinct through racial senescence implied in the great overgrowth and spread of their antlers. "In general," says Professor Lull, "this seems like growth force run riot, as though with lessening vitality incident to racial old age, it is no longer adequately controlled." This is seen for instance in such animals as brachiopods, crinoids, or the many bizarre forms of dinosaurs. Minot has defined old age as an accumulation of changes which began dur-

*Read in part before the Medical section of the Wayne County Medical Society April 13, 1926.

ing the earliest youth and continue throughout the entire life of the individual. Old age is not a disease and therefore cannot be cured. (Moodie) "According to present evidence, disease is from the geological standpoint relatively recent in its origin, and has afflicted the inhabitants of the earth for only the last one-quarter of the earth's history—that is, from the last twenty-five million years out of a possible one hundred million years."

The oldest known fractures with healing and callous formation are illustrated by a left radius of an ancient reptile known as *Dimetrodon*. The specimen is in possession of the University of Chicago. It was found in the Permian beds of Texas and is probably not less than twenty million years old. A comparison of the method of bone repair of the Permian age with that of today shows the process to be similar. Fractures of the dinosaurs of the Mesozoic have been collected. Even at this early time are also found evidences of arthritic lesions, of caries and necrosis. In animal life since this period lesions due to trauma and disease are plentiful.

ANTIQUITY OF BACTERIA

There are evidences of bacteria as far back as the Devonian period. Their spores have been found in thin sections of rock. Furthermore we have the evidence of bacterial action, necrosis and osteomyelitis being bacterial diseases. Osborn says: "A bacterialess ocean would soon be uninhabitable both for plants and animals; conversely it is probable that bacteria-like organisms prepared both the earth and the ocean for the further evolution of plants and animals and that life passed through a very long bacterial age." The same writer goes on to say that in the origin of life, bacteria appear half way between what he terms the chemical precellular stages and the chemistry and definite cell structure of the lowest plants. They are classified more by their chemical reaction than by their shape owing to their minute size and often actual invisibility. The discovery, according to Osborn, of the chemical life of the lowliest bacteria marks an advance towards the solution of the problem of the origin of life as important as that attending the long prior discovery of the chemical action of chlorophyll in plants.

The lowest bacteria known as "primitive feeders" possessed the peculiar faculty of finding food and energy in a lifeless world deriving energy both directly and from inorganic chemical compounds. These so-called primitive feeders are classified among the nitrifying bacteria since they take up nitrogen from ammonia compounds. They

are said to have abounded on the lifeless earth and to have prepared both the earth and waters making them chemically suitable for the lowly forms of plant life.

From the point of view of geologic time, bacteria have been proven to be of great antiquity. Walcott announced in 1915 the discovery of fossil bacteria found in a section of chlorophyll-bearing plants the age of which he estimated to be about thirty-three million years.

The lowest bacteria, it will be seen, were not parasitic in character. The parasitic bacteria began with their symbiotic relations with other bacteria and finally extended to include all animal and plant life. It was not until bacteria took on their parasitic character that we have pathogenic forms. The pathogenic bacteria represent only a small portion of bacterial flora. The greater number are benign and a positive necessity without which animal and plant life would cease to exist.

As a result of a study of plant and animal material, Renault announced the presence of bacteria in the middle paleozoic. These micro-organisms produced disintegration of dead tissue and were not pathogenic.

In the study of prehistoric infections the student is of necessity limited in his quest to those diseases which affect bone, particularly those that are manifest in increased density, such as bone proliferation. Soft tissue disease is lost to study. Without doubt there were great epidemics that had worked havoc among prehistoric men, diseases of which from their very nature no evidence remains. The pathology that has come down to us from prehistoric times denotes chronicity. Bone changes sufficient to register in an X-ray plate are more or less the result of chronic process. Osteomata or bone tumors have also been noted among extinct vertebrates.

FRACTURES ABOUND AMONG FOSSIL REMAINS

Moodie, who has made a study of the antiquity of disease has found fractures plentiful among fossil vertebrates. Multiple arthritis and necrosis have been found in bones of extinct animals. This writer mentions the presence of *opisthotonos* as a phenomenon that is not confined to the human race. *Opisthotonos* is that peculiar bowing or arching of the vertebral column due to spasm. This in the skeleton of extinct vertebrates would indicate that death had been caused by some condition which produced a profound spasticity.

It is well known that certain parts of the United States were at one time occupied by a race commonly known as mound builders.

from the huge earthworks created by them. Little is known of these prehistoric people. Early explorers were unable to obtain any information from the American Indians concerning them. The mounds which they built along the valleys of Ohio rivers and elsewhere contain the whole story. The mound builder tribes were evidently static rather than nomadic in their habits. They must have been at one time a vigorous race. The mounds were for purpose of religion, for burial and for fortification. The Ohio mounds have been so extensively explored that Dr. Means, my source of information, had at his disposal for X-ray study nearly five hundred skeletons. An X-ray study of the bones showed evidence of bone disease and fractures as well as wounds from such weapons as spears and arrows. Such diseases as tuberculosis that cause decalcification of bone would not directly show, though Means discovered what he interpreted as Pott's disease of the dorsal vertebrae, manifest by the erosion and coalescing of two adjacent vertebrae. He was, however, able to show definite evidences of bone syphilis. Syphilis is said to have been prevalent in Haiti at the time of the discovery of America and was introduced into Europe by the sailors of Columbus on their return to Italy. Doubtless the mound builders of Ohio, through such commerce as existed at the time, came in contact with the Gulf of Mexico and the islands therein, which would account for the presence of the disease. Coxa Vara was also found in femurs which was presumably due to rickets. Hypertrophic arthritis was found in many instances. Two tibias were examined which showed evidence of arthritis deformans. A humerus was discovered which showed a definite healed osteomyelitis. Many fractures were found, the healed results of which compared favorably with the average before the use of the X-rays became general.

The diseases of prehistoric man which lend themselves to radiographic study are practically the same as those which prevail at the present time. Pathological conditions among ancient vertebrates resemble modern forms.

ATTEMPTS TO INVESTIGATE PAIN

Along with the study of prehistoric disease we might appropriately include prehistoric therapeutics. Surgery undoubtedly had its beginning before medicinal treatment, at least if we are to go by the only evidence available. Prehistoric human remains show the results of many attempts towards the alleviation of pain. Primitive surgery had its origin in conjunction with the religious practice of shamanism. The shaman was the medical man or priest. The belief that possessed the mind of the primitive savant was that in his surgical interventions he was letting out evil spirits; or his efforts were effective in appeasing an angry god. The sha-

man was able not only to drive off spirits which brought sickness and misfortune but he was able also to invoke others which conferred health and success. Headache was as troublesome to primitive man as it is to men of the present day. The treatment consisted of boring a hole through the skull to let the demon out. Skulls have been found in which several holes had been bored showing thereby inefficiency of the first operation. Trephining is, therefore, probably the most ancient surgical operation. It was frequently performed, 10,000 years ago in Neolithic times. This practice has been found in areas as wide apart as western Europe and North and South America. Broca thought that prehistoric trephining was performed in order to relieve insane persons of so-called demons. Evidence has been gathered showing the use of the cautery. Finger amputations and other mutilations have been found drawn on the walls of a cave in Spain at a time estimated at possibly 25,000 years ago. Amputated fingers and hands have been found in great numbers on the walls of paleolithic caves. The sacrifice of bodily members was doubtless to appease some angry deity.

Moodie showed that trephining was the most highly developed surgical art in Peru in the time of the Incas. The instrument used in performing the operations was a sharp edged stone, the process being one of cutting and scraping.

TUBERCULOSIS

*"While meagre phthisis gives a silent blow,
Her strokes are sure but her advances slow,
No loud alarms nor fierce assaults are shown,
She storms the fortress first,
Then takes the town."*—Garths Dispensary.

Tuberculosis is perhaps one of the most widely known diseases. Its ravages have not been limited to any time or place. It is older than civilization itself. Tuberculosis has been the scourge of all peoples as far back as human records go. When a disease has been endemic in a community for a long time, it tends to lose its virulence and to become milder in character. This fact—a sort of survival of the fittest—coupled with results of scientific study of the disease, has rendered tuberculosis less a menace today than at any other time in human history. The known incidence of tuberculosis dates back over two thousand years B. C. In the code of Hammurabi written 2250 B. C., there is a reference to a disease which is presumably tuberculosis. The Hebrew race doubtless developed the disease very early, as they seem to have acquired a greater immunity to it than has any other race. It is thought at least one of the plagues that afflicted Egypt during the Exodus was tuberculosis.

The earliest record of tuberculosis known to

us in India is thirteen centuries before the Christian era where pulmonary consumption and swelling of the glands of the neck were recognized as a disease entity. About the middle of the sixth century B. C. it had been recognized among the Chinese. The early Greeks recognize the clinical aspect of what we now call tuberculosis, and labelled it with a name, "phthisis" which means "wasting away." It is needless almost to say that the bacterial origin of the disease was not recognized by the ancients. The Latin word *consumere*, to burn up, or its derivative "consumption" is descriptive of the disease from the observations of the early Romans.

The Greek idea of tuberculosis is contained in the writings of Hippocrates. These writings may be taken to fairly represent the Greek thought of the day. The physicians in Rome were largely Greek physicians and for this reason we have the Hippocratic influence on Roman thought.

Hippocrates in the following paragraph gives a rather lucid account of tubercular pleurisy and empyema, or lung abscess.

"Tubercles also form in the lung: when phlegm or bile is collected there, it rots; and so long as this remains hard it produces a light pain and dry cough; but when it has ripened, the pain becomes quite acute both in front and in the back and heart and a severe cough seizes the patient. If maturation and rupture are very prompt and the pus finds a way out and is fully expectorated and if the cavity in which the pus has formed contracts and dries up, the patient gets completely well. On the contrary, even when there is prompt ripening, rupture and emptying out, and the cavity does not dry up completely and the tubercle furnishes pus on its own account, the case is fatal; for the phlegm flowing from the head and from the rest of the body into the tubercle rots, becomes pus and is expectorated; and from this the patient perishes and he succumbs to the looseness of bowels following the happenings which I have enumerated in preceding cases; the patient retains his full consciousness in all matters and in every way; he dries up and expires, all the veins of his body closing up just as if the blood had been consumed by the fever; and sometimes on account of the duration of the disease, the severity of it, the virulence of it in the beginning and the complications which have arisen. In cases in which the rupture cannot occur in good time, neither spontaneously nor through the application of remedies, the patient melts away with the most intense pain, lack of nutrition, cough and fever and ordinarily succumbs. When the pus gets egress at a time when the patient is already emaciated and in bed he has not the slightest chance of recovery and death comes on in the same manner. Even when ripening and rupture are quite rapid but the pus as it rots pours over the diaphragm, the patient for the time being appears to be much relieved; but as time goes on and later when the pus has been fully expectorated, the cavity which contained it contracts and is dried up, and the patient gets well; but alas! after a long time the patient becomes weak and is not able to expectorate; one operates, either by a cauterization or by incision; the pus is evacuated and at first in this way also it appears that relief has been obtained, but the end of the disease has not been reached nor will it be except in the same manner as indicated in the preceding case."

The Greeks we see discovered tubercles and connected them with disease of the lungs. They recognized empyema, pleurisy with effusion, pneumo-thorax and pulmonary hemorrhage. They anticipated our modern treatment of effusions in the pleural cavity, namely, drainage. Hippocrates goes into detail in describing the operation.

THE INFLUENCE OF GALEN

Galen (130 A. D.—200 A. D.) was born in Greece and wrote in the Greek language; yet he became thoroughly Roman as he had spent most of his life in Rome. He observed every phase of tuberculosis. His writings not only on tuberculosis but on every other phase of medicine were so complete that he had a more or less paralyzing influence on subsequent centuries so that there had been very little progress in the knowledge of tuberculosis between the third and seventeenth centuries. During the period of the Dark Ages so-called, Galen continued to be the authority on medicine.

Rhazes in the tenth century repeated the views of Hippocrates and Galen on tuberculosis. Maimonides, a Jewish physician of the twelfth century, recognized some relation between the pearl disease of the cattle and tuberculosis from his supervision of the meat of animals for the Orthodox Jews. Our first meat inspection had therefore a religious origin. Maimonides prescribed rules for the use of flesh among his people. Benedictus in the sixteenth century practically reiterated what had been said by Hippocrates and Galen. Tuberculosis according to him came from hemoptysis. As his predecessors had done he confused cause with effect.

TUBERCULOSIS SPREAD FROM EAST TO WEST

Tuberculosis appears to have spread from the east to the west and northwest. In the Roman references to the barbarians the vigor of these races rather than their weakness by disease was always commented upon. Caesar in his conquest of the Gauls and Britons and in his Germanic wars described his foes as of giant stature and as being particularly agile in battle. Doubtless their virility was due in large measure to their isolation. One recalls Caesar's account of the Belgians whom he describes as possessing great prowess, due he says to the fact that merchants less often visit them and bring them those things which tend to weaken the mind. The peoples which were earliest conquered by the Romans were the first to achieve relative immunity from tuberculosis. The Roman conquest as we know extended northward to westward to include England. It is a noteworthy fact that the Irish who were never conquered by the Romans are more disposed to tuberculosis than either the English or the French.

Sylvius (1648-1672) Professor of Medicine in the University of Lyden in his autopsy work found not only tuberculosis in the lungs but also in the lymphatic glands. The first feature of the observations of the ancients was, that, while recognizing various aspects of the disease they failed to note the common origin of such disease entities as pulmonary tuberculosis and bone and glandular involvement. Sylvius was the first to associate enlargement of the lymphatic glands with tuberculosis. He believed in what he termed the hereditary nature of this disease, a theory which has been current to within recent times. Regarding the tubercle he says: "I do not hesitate to credit these tubercles with being the hereditary and fatal predisposition to consumption to certain families even though they are not encountered anywhere else in a form in which they can be outwardly recognized." Sylvius recognized the relation of the lymphatic glands to tuberculosis and concluded that the glands were present in the body in a healthy condition but so small as to escape detection. He also recognized the contagiousness of the disease. Speaking of contagion as a causative factor he says: "According to it the air expired by consumptives has been brought close to the mouth and nose and is drawn in and in this way offensive and irritating emanations are continually carried from the affected person to others, especially relatives, and when these are finally infected with the same poison they also fall into phthisis."

GALEN'S INFLUENCE WEAKENS

Late in the seventeenth century when autopsies began to be performed more frequently, confusion resulted between the work of Galen and the appearance of the tissues found at autopsy. The medical profession of the time became divided between the adherents of Galen and the adherents of Sylvius. Strange to say at this time (1624-1689) Thomas Sydenham the English Hippocrates preferred to follow Galen rather than his contemporary Sylvius. Boerhaave also clung to the teachings of Galen. Morgagni (1682-1771) held to the multiplicity of the causes of tuberculosis and questioned the relation of tubercles to the lymphatic glands. He mentions that "one or the other lung abounds in hard tubercles bordering on a white color mistaken for glandular bodies." He does not associate these with tubercles. By the aid of the X-rays it is possible to show these tubercles and also dense calcified spots with great clearness.

Any person who contributed to our knowledge of disease through refinement of diagnosis would be entitled to consideration in any historical sketch. In this connection are two names Auenbrugger whose epochal work on Percussion was published in 1761 and Laennec whose "Treatise on the Diseases of the Chest and

Mediate Auscultation" appeared in 1818. Auenbrugger's work on percussion was published after seven years' observation and testing the value of the method. Laennec's contribution to our knowledge of tuberculosis was the greater. His paper is about forty five pages in length. In his introduction he tells us how he came to invent the stethoscope. "In 1816," he says, "I was consulted by a young woman laboring under general symptoms of a diseased heart, and in whose case percussion and the application of the hand were of little avail on account of the degree of fatness. I happened to recollect a simple and well known fact in acoustics, and fancied it might be turned to some use in the present case. The fact I allude to is the great distinctness with which we hear the scratch of a pin at one end of a piece of wood on applying our ear to the other. Immediately on this suggestion I rolled a quire of paper into a kind of cylinder and applied one end of it to the region of the heart and the other to my ear and was not a little surprised and pleased to find that I could thereby perceive the action of the heart in a manner much more clear and distinct than I had ever been able to do by the immediate application of the ear." Laennec's work is divided into three parts; the first is concerned with methods of diagnosis of diseases of the chest; the second, with diseases of the bronchi, lungs and pleura and the third with the heart and its appendages.

Laennec was born in Lower Brittany in 1781. He was five years old when his mother died of tuberculosis, a significant fact as he himself struggled against the disease and finally died of it at the early age of forty five. The present year is the hundredth anniversary of Laennec's death.

He may be called the founder of our knowledge of tuberculosis, as a separate disease. Before his time it had for the most part been considered a "degeneration."

VILLEMIN'S EXHAUSTIVE STUDIES

Villemin, in 1867, published his "Studies on Tuberculosis, Rational and Experimental Proofs of its Specific Nature and its Inoculability." This book was the most exhaustive treatise on the subject up to this time. The author placed the infective nature of the disease on a solid experimental basis. By careful conceived and conducted experiments on animals, he showed that tuberculosis was an infective disease, due to a specific virus of a parasitic nature, which was introduced from without. He showed that the virus was capable of multiplying indefinitely in the bodies of animals, and of being handed on from one animal to another by inoculation. He also demonstrated by experiments on animals the causal unity of the numerous manifestations of tuberculosis, such as phthisis, case-

ous pneumonia, scrofula and lupus and joint disease."*

Indebtedness should be acknowledged also to Rudolph Virchow (1821-1902) the founder of cellular pathology whose studies included the tubercle. His chief contribution consisted in describing the exact nature of tuberculous matter though he failed to see that tuberculosis, lupus, and scrofula were different manifestations of the same disease process.

KOCH DISCOVERED THE GERM IN 1882

It remained for Robert Koch to make the greatest contribution to our knowledge of the white plague. In 1881 Koch showed members of the International Medical Congress at London the tubercle bacillus, the actual causative factor of the disease. His first published account of the great discovery was March 24, 1882. I quote the following significant sentences: "Henceforth in our warfare against this fearful scourge of our race, we have to reckon not with a nameless something, but with a definite inmate of the body; its conditions of existence are for the most part already known, and can be further studied. Before all things we must shut off the sources whence the infective material comes, so far as it lies in the power of man to do this."

Next to actual sight of the tubercle bacillus the greatest recent contribution to diagnostic methods of studying diseases of the chest is the X-ray. The costal grill with its contrasting contents of heart and lungs lends itself admirably to roentgenographic inspection, bringing slight variations in density into relief.

Since the discovery of tubercle bacillus intelligent efforts have been directed mainly toward curtailing its ravages. Tuberculosis has numbered among its victims not only scientists of Laennec's type, but also poets and authors, such as Keats, Stevenson, Thoreau and Henley, who were cut off in their early manhood to the great loss of mankind.

PNEUMONIA AND INFLUENZA

Pneumonia is one of the oldest of respiratory diseases to be recognized as a clinical entity. It was known to Hippocrates who sometimes confounded it with pleurisy. Osler quotes a remarkable description of the disease by Aretaeus: "Ruddy in countenance, but especially the cheeks, the white of the eyes very bright and fatty; the point of nose flat; the veins in the temples and

neck distended; loss of appetite; pulse at first, large empty, very frequent as if forcibly accelerated; heat indeed, externally feeble and more humid than natural but internally very dry and hot, by means of which the breath is not; there is thirst, dryness of the tongue, desire for cold air, aberration of the mind; cough mostly dry, but if anything be brought up it is frothy phlegm, slightly tinged with bile or with a very florid tinge of blood. The blood stained is of all others the worst."

Nothing especially noteworthy was added to our knowledge of pneumonia during the dark ages. The next more important contribution was the work of Laennec made possible by his new diagnostic device—the stethoscope. Laennec's very skilful use of this new diagnostic aid led to a refinement of diagnosis so that exact localization of the pathology was possible.

Influenza was evidently epidemic during the dark ages as well as during the nineteenth and twentieth centuries. A condition known as the "sweating sickness" formed the connecting link between mediaeval and modern influenza. We read about "sweating sickness" for the first time in England in the year 1485 when the disease was characterized by a high mortality. We find outbreaks recorded in 1529 and 1551. It is possible that this disease fell on virgin soil which accounted for the great fatality, for it is less a matter of record during succeeding generations. The clinical descriptions of the "sweating sickness" that have come down to us would apply fairly to influenza as we know it. One writer described it "as an evil and unheard of cough which affected everyone far and near and cut off many." The term "la grippe" was first used early in the eighteenth century. In the eighteenth century outbreaks, in addition to fever and sweats, reference has been made to persistent rheumatic pains. The first epidemic of the nineteenth century was in 1803. In the United States the New England settlements were visited by influenza epidemics in 1660. In 1747 the influenza raged all over North America. This epidemic was described by a physician at the time as beginning "with a severe pain in the head and limbs, a sensation of coldness, shivering succeeded by great heat, running at the nose and a troublesome cough. It continued for eight or ten days and generally terminated in sweating." And again references are made to "great prostration of strength, a labor of breathing, pains about the breast, precordia and in the limbs." It was epidemic again in 1781, all over the United States.

*Extract from evidence before the Royal Commission on Vivisection by Martin of the Lister Institute (1907).

Coming to the nineteenth century 1889-90 a great epidemic spread rapidly over the world along the lines of travel. It girdled the globe in an incredibly short time.

The greatest pandemic of influenza in the history of the world occurred in 1918. The loss of life during this epidemic was as everyone knows, appalling. The total loss of lives directly and indirectly traceable to it will never be known. In the United States alone the deaths from this epidemic approximated nearly 600,000 or five times the number of American soldiers who lost their lives from all causes during the world war. It is inconceivable what the mortality would have been under conditions as they existed one hundred years ago with the unhygienic conditions which prevailed during that time.

DIPHTHERIA

The history of our knowledge of diphtheria falls into four periods. The first is the era of clinical observation; second covered the period of pathological and anatomical approach whereby knowledge became more exact through the refinement of technic accompanying the development of the microscope. The third stage might be called experimental and etiologic when attempts were made to produce the disease experimentally in animals. The virus of diphtheria was first recognized by Loeffler in 1884. In 1890 Behring and Kitasato devised diphtheria antitoxin which initiated the fourth and last period of our knowledge which may also include the use of toxin-antitoxin as an immunizing agent.

The period of clinical observation began in the times of Aretaeus or perhaps, better, in that covered in the Hippocratic writings, and lasted until the third decade of the nineteenth century. In classical literature are many references to sore throats, distinguished by such names as quinsy, angina, cynanche, the last terms inspired by the cyanosis accompanying laryngeal diphtheria. Aretaeus, the Cappadocian, who lived during the second century, A. D., wrote on ulcerations about the tonsils: "Ulcers occur on the tonsils; some indeed of an ordinary nature, mild and innocuous; but others of an unusual kind, pestilential and fatal. * * * Such as are broad, hollow, foul and covered with a white livid or black concretion, are pestilential." He goes on to describe the laryngeal type of Egyptian and Syrian ulcer in which the disease spreads to the thorax by way of the windpipe and occasions death by suffocation in the space of a day.

During the dark ages the records are

scanty and incomplete though epidemics of sore throat have been reported.

In the period of 1583 to 1666 we come across a disease that appeared as an epidemic in Spain, to which were given the names *morbus suffocation* or *garrotilla*, (strangulation). Spanish writers of this time have described the disease very completely, leaving little doubt but that the scourge was what later came to be known as diphtheria. The fetid odor and the membrane (*crusta*) are noted in their clinical descriptions. Some compared the membrane to "wet leather," or "wet parchment."

The disease spread from Spain to Italy in 1618 where its ravages proved deadly. After this time only sporadic cases were reported though it appears never to have been entirely absent.

The first account we have of diphtheria in the United States is that of an epidemic that ravages New England in 1659, referred to as "*cynanche trachealis*." At the cessation of this scourge in 1662 a day of Thanksgiving was ordered by the Connecticut legislature.

The next epidemic of sore throat, (the victims of which were mainly children) in New England was reported in 1735-6. Bard (1771) named the disease *angina suffocativa* and described it as "uncommon and very dangerous." This writer who was professor in Kings College (Columbia) drew the clinical picture with which every physician is more or less familiar. Other epidemics were reported among the colonies in 1742, 1755 and 1775.

Francis Home of Edinburgh wrote a small work entitled an Inquiry into the nature, cause and cure of Croup (1765), in which he succeeded in befogging the subject of throat distemper for almost a century. He regarded it as a rare disease about which little was known.

One of the most important names in connection with the development of our knowledge of this disease is that of Bretonneau (1778-1862) of Tours, France. In Bretonneau's work it is generally conceded that we have a medical classic of the first rank, to which from a purely clinical viewpoint very little has been added. From the post mortem study of a large number of cases he formulated his doctrine of "diphtherite" as a specific disease. The concept of "croup" announced by Home was swept away. Bretonneau performed the first successful tracheotomy in June, 1825. He was the first to use the word "diphtherite." The word as we have it, "diphtheria" was suggested by Farr in England in 1858. Diphtheria comes from the Greek word "*diplithera*," meaning

"leather." The word refers particularly to the membrane.

Bretonneau regarded diphtheria as the result of a special virus and also recognized its contagious nature.

The era of the "cell" was ushered in by Schleiden and Schwann. Their work made possible the great superstructure of cellular pathology by Virchow, who described a diphtheritic type of membrane in which the exudate consisted of coagulated fibrin lying in the superficial layers of mucous membrane itself, and between its cell elements.

The experimental stage consisted in attempts to produce diphtheria in various ways. Irritant substances such as acids, in vapor form, and of ammonia, caustic potash and other agents were introduced into the throats of dogs, rabbits and guinea pigs. Typical false membranes were, of course formed. It was in 1869, however, that Trendelenburg published the first successful results from the inoculation of diphtheritic material. Following this a number of cases of accidental inoculation, in which doctors had been infected during the performance of tracheotomy, were noted. Fourteen such cases had been recorded up to 1884.

KLEBS AND LOEFFLER DISCOVER GERM

In 1875, Klebs discovered the germs of diphtheria and seven years later Loeffler obtained them in pure culture; hence the name, Klebs-Loeffler bacillus. In 1888 Roux demonstrated that the diphtheritic toxin could be filtered, thereby separating out the germs and that toxin would produce in animals the effects of the disease itself. In 1890, Behring and Kitasato discovered that animals might be immunized against diphtheria by graduated doses of the toxin.

The discovery of antitoxin by Behring is probably the greatest ever made in medicine. It was the result of constructive effort to rid mankind of this great scourge. The first child to be treated by antitoxin was a patient in a Berlin clinic on Christmas night, 1891. It was not, however, until 1894 that antitoxin came into general use. Roux and Martin were the first to employ horses for the preparation of antitoxin and consequently gave it a wide range of application.

Trousseau, the father of modern tracheotomy popularized the operation and devised the tracheotomy tube. This operation, however, fell into disuse in 1880 when O'Dwyer began his studies on intubation, resulting in the invention of the intubation tube. The next landmark in the conquest of the disease was Schick's test in 1913, the purpose of which was to ascertain the susceptibility to diphtheria. Theobald Smith in

1907 suggested the possibility of immunizing human beings to the disease, a feat safely accomplished by von Behring in 1913. The work of von Behring was corroborated by Park and Zingher of Buffalo and New York respectively, who used a mixture of diphtheria toxin and antitoxin. This work was performed in 1914-15. Since that time the use of toxin-antitoxin for immunization against diphtheria has become well known and general. A method is being developed at the University of Minnesota whereby children may be immunized against diphtheria and scarlet fever without being sensitized to serum.

SYPHILIS

Very few diseases there are to which whole books are devoted and perhaps syphilis is the only disease which has a specialist of its own—syphilologist. The name "syphilis" was first introduced into medical literature by Fracastoro of Verona who published in 1530 a Latin poem bearing the title "Syphilis sive morbus gallicus." From syn with or together and philos, love. While the direct mortality from syphilis is comparatively low, the morbidity from its protean manifestations is very high. Probably no other disease is so important in an economic sense. Not only does it impair the efficiency of all labor, but it reduces more persons to a state of dependency than any other ailment. Estimates in terms of monetary loss have been made but anyone will readily see that such calculations are futile.

I have already mentioned the incidence of syphilis among the pre-Columbian Indians, the mound builders, as described by Means. The disease appears to have been unknown in Europe prior to the return of Columbus' sailors in 1494. In this year it made its first appearance in Italy, having been introduced from Haiti, West Indies. It spread from Italy to Holland and to Greece in 1496; to the British Isles 1497 and to Russia in 1499. From Europe it was carried to the Orient, reaching Japan in 1569.

Other writers hold the disease to be of great antiquity, that it existed as far back as the stone age. They claim that it was also prevalent in China, twenty-six centuries before the Christian era. Opinion is divided in regard to whether syphilis was prevalent among the Jews of the Mosaic period. The principal evidence affirming consists in certain interpretation of Bible texts; some deny the earlier presence of syphilis since no evidence of the disease involving bony structures has survived. Hippocrates in the third book of Epidemics describes a disease which some take to have been syph-

ilis. Before the period ushered in by the discovery of America, however, the records are more or less shadowy; since that time the evidence is fairly definite.

Dr. James Inches, of Detroit, told the writer that during his itinerary through Africa, in Uganda, syphilis had become such a problem that the British government had undertaken to finance the treatment of two and a half million natives, 95 per cent of whom are said to have been infected through contact with Arab slave traders. The still-births were so numerous that the population is likely to become extinct. In as much as native labor is essential for working the resources of Uganda, clinics have been established, at which pregnant native women are treated and cared for until they give birth to full term children.

Syphilitic lesions were described by John de Vigo about the beginning of the sixteenth century; John Hunter (1728-1793) gave a very clear description of the chancre—the primary lesion. He, however, made the mistake of asserting that gonorrhea, syphilis and chancroid were different manifestations of the same disease and that they had a common cause. Hunter was the first to study syphilis experimentally, having inoculated himself with it in 1767, then studying it in his own person. Ricord was the next great authority on venereal diseases. Born in 1799, he lived to be ninety years old. He was the first to recognize the three classical stages of syphilis. He also popularized the use of potassium iodide in the treatment of the later stages. Thom quotes Oliver Wendell Holmes' description of Ricord; "The Voltaire of pelvic literature—A skeptic as to the morality of the race in general, who would have submitted Diana to treatment with his mineral specifics, and ordered a course of blue pills for the Vestal virgins."

Of course we have again to pay homage to Virchow who was the first to recognize the periods of latency as well as the recrudescence the disease. Schaudinn and Hoffmann discovered the *treponema pallidum* in 1905. The Wassermann test as a diagnostic agent was demonstrated in 1907. Ehrlich produced his "606" or Salvarsan in 1910. Since the discovery of the bacterium and Ehrlich's method of treatment with later refinements of the method, the disease is yielding to the constructive advances of scientific medicine.

THE CONQUEST OF SMALLPOX

The earliest account of smallpox was written in 922 by Rhazes the Arabian physician, though the disease existed much earlier than this time. It is said to have been known

in China as early as 1200 B.C. It has prevailed in Europe since the sixth century. Since the thirteenth century the disease has been epidemic in various countries. All efforts to check its ravages availed but very little until in 1798 Jenner introduced vaccination. The method of prevention of smallpox that prevailed up to Jenner's time was that of "inoculation," the effects of which were often as bad as the disease itself. The procedure consisted in producing in the person an artificial attack of smallpox, and seeing the patient safely through the infection. Several doctors became noted for their skill in inoculation and the operation became a sort of specialty with them. The operation of inoculation was attended by risks through the danger of introducing other infective agents into the system. The only advantage of this old method of prevention consisted in the fact that the patient could select the time and place when he wished to have smallpox, but there was no guarantee that the induced disease might prove less dangerous than that accidentally acquired. Many, however, placed faith in the method for Benjamin Franklin wrote in 1788: "In 1736, I lost one of my sons, a fine boy of four years by the smallpox taken in the common way. I long regretted bitterly, and still regret that I had not given it to him by inoculation."

Inoculation was superseded by vaccination. Jenner was consulted by a young woman who had come to seek his advice. Smallpox was being discussed when she told Jenner that she could not take it as she had already been infected with cow-pox. This impressed Jenner so that he set to discover a method to prevent smallpox. Some time later he examined the tradition that prevailed among the country folk to the effect that milk maids who had had cow-pox were immune to variola. In 1789 he inoculated his eldest son with the virus of swinepox. Some time after the period of reaction, the boy was inoculated with the virus of smallpox, without the slightest inflammation being manifest. In 1796 matter was taken from the hand of a milk maid who had been infected by her master's cows and inserted by two incisions in the arm of a healthy eight year old boy. The usual course of vaccination followed but it yet remained to prove that the boy was immune to smallpox. A few months later, matter taken from a pustule was inserted by several incisions in the arm but no disease followed. Shortly after this Jenner wrote to a friend: "You will be gratified in hearing that I have at length accomplished what I have been so long waiting for, viz., the passing of the vac-

cine virus (the virus of Cow-pox) from one human being to another by the ordinary mode of inoculation. I was astonished at the close resemblance of the pustules, in some of their stages, to the variolous pustules. But now listen to the most delightful part of my story. The boy has since been inoculated for the smallpox, which as I ventured to predict, produced no effect. I shall now pursue my experiments with redoubled ardor."

Jenner did not, however, rush into print. He endeavored to confirm his discovery by further experimentation and it was not until two years later that he published his findings in a paper of about seventy pages entitled "An Enquiry Into the Causes and Effects of Variolae Vaccine."

The medical profession were divided in their acceptance of Jenner's discovery. Many influential physicians of London recognized it but others opposed it owing to mixed infection that frequently accomplished the procedure. Parliament, however, recognized his discovery by presenting him with 10,000 pounds.

It is impossible for the present generation to appreciate the enormity of smallpox in the pre-vaccination period. Compulsory vaccination, for the first time in England in 1851, produced a condition after which there was only one widespread epidemic, that of 1871-2, when the disease overran both Europe and America in the subsequent half century. Before the time of compulsory vaccination, epidemics recurred from three to five years. Today smallpox is one of the least feared of infectious diseases, owing to the fact that it is capable of being placed under complete control.

Until the seventeenth century measles and smallpox were not clearly differentiated. Measles was considered a mild form of smallpox. Rhazes wrote on the smallpox and measles as if they were intimately related. Sydenham was the first to describe measles as a separate disease. Like smallpox it has had its periods of great virulency. No specific micro-organisms have been discovered nor any method of prevention except isolation and rather loose quarantine.

TULAREMIA

There is a disease which, from its very newness, is deserving of a brief space in our historical study, namely tularemia. This disease was first recognized by McCoy as causing great havoc among the ground squirrels of California. McCoy and Chapman discovered the infecting micro-organisms and called it bacterium tularense from the name of the county Tulare, California in which the disease was first recog-

nized. The disease runs the course of a plague among rodents, particularly rabbits and squirrels. It was named tularemia in 1921 by Francis of the United States Public Health Service, who investigated numerous cases in Utah. The pathology partakes of the nature of a bacteremia. Two types of tularemia have been described, namely a typhoid and glandular, the later consisting of an enlargement of the lymphatic glands nearest to the focus of infection. The infection is transmitted from rodents to man by a blood sucking fly which, having bitten a sick rabbit, proceeds to inoculate man. Hunters and cooks who handle and dress rabbits are apt to become infected directly. So far as recorded tularemia is particularly an American disease incident to the western states.

THE GROWTH OF PREVENTIVE MEDICINE

The history of many diseases is closely associated with the development of sanitation. Dr. Mitchell Bruce, in his Harveian oration, 1913, described a condition that prevailed in England during the latter part of the seventeenth, the eighteenth and early nineteenth centuries, during which period fevers flourished in the civil population. "General poverty and ignorance and hand-to-mouth existence, breaking down when famine happened to prevail, led to overcrowding into tenements in towns where men, women and children lived wretched and dissolute lives, without the smallest provision for a supply of wholesome water, or the removal of dejecta, effuvia, and dirt of other kinds. Ventilation was at a premium, for the window tax had fallen on habitation, and also on gaols and prisons maintained and worked on a corrupt proprietary system, and crowded with debtors and criminals alike." The situation which prevailed in England was to be found in other European countries. The coarse joviality and vice of the times formed themes for such writers as Fielding, Smollett and Dickens. England was the first country, however, to become alive to the significance of these physical and social evils. The awakening must be credited to the far-sightedness of physicians of the time. They condemned the shutting up in infected houses, the well with the sick until all had either died or recovered. Mead in 1720, had recommended the establishment of a council of health, to isolate infected persons and to remove those in good health to fresh quarters. He advocated the destruction of infected houses in case of plague and the burning of their contents. John Howard, whose name is associated with prison reform, bent his efforts to rendering the jails of England more sanitary in the way of improved ventilation. It was early discovered that it was not only necessary to educate physicians, but the people at large had to be educated also to the extent of intelligent co-operation. Great Britain was the first country to place

practical sanitation on a scientific basis, with the result that typhus fever was wiped out in less than a quarter of a century of hard work. The severity of this scourge may be estimated when it is understood that one-fifth of all the doctors of Ireland died of it during an epidemic in the early 40s of the last century. The flea, louse, bedbug, house flies and mosquitoes have all been recognized as transmitters of disease.

Malaria has a very long history. Some writers believe that the downfall of ancient Greece was due largely to this disease. The beginning of the conquest of malaria was the result of the work of Patrick Manson in 1879, who associated the disease with mosquito. Theobald Smith in 1889 demonstrated the wide spread of infection through insects. In 1880 a young French army surgeon, Laveran, working in Algiers with his microscope, found in the red blood corpuscles little bodies of an ameboid character which he believed to be the germs of the disease. Laveran was somewhat ahead of his time, for it was not until several years later that the protozoan parasite discovered by him was generally recognized by medical workers. Ronald Ross, working in India, found that the disease was transmitted by mosquitoes. Malaria throughout its long history has been one of the most thoroughly studied of all diseases. It is now confined largely to the tropics.

The conquest of yellow fever also represents one of the greatest triumphs of scientific medicine. In the West Indies and in the southern states, mortality from this disease has been as high as one in ten. The success of the scientific work on malaria gave the cue that yellow fever might be also an insect borne disease. In the year 1900, during the occupation of Cuba by the United States, a commission was appointed to undertake fresh investigation of the unsanitary conditions of Havana. The names of the members of this commission are well known to the medical profession. Dr. Walter Reed of the Army Medical School was placed in charge. His associates were Doctors Carroll, Agramonte of Havana, and Jesse Lazear. The story of the conquest of this dreadful scourge is one of greater heroism than the more spectacular perils of war. The commission proved that yellow fever was transmitted by the mosquito. Lazear permitted himself to be bitten by one and died twelve days later. He lived long enough to show that yellow fever was the result of an infection conveyed by mosquitoes.

The beginning of quarantine in United States was occasioned by yellow fever. The first recorded case in what is now the United States was in 1647 when the disease was known as Barbadoes distemper. Quarantine was raised two years later with the disappearance of the disease. In 1665, on October 11th, the general court of Massachusetts or-

dered all ships coming from England to be quarantined owing to the great plague of London. Defoes "Journal of the Plague" was written many years after the plague, but it has such an air of versimilitude that many people have been deceived into thinking that it must be the account of an eye witness.

The sanitation of Havana was placed in charge of Dr. Gorgas and within nine months the city was freed of yellow fever, and following this time the West Indies were entirely freed from the scourge. It is a matter of common knowledge that these two great victories of scientific medicine, namely over malaria and yellow fever, made the completion of the Panama Canal possible. Doctor, afterwards Colonel Gorgas, was placed in charge of the sanitation of the Canal Zone. Yellow fever has been so completely eradicated that it has never returned.

Typhoid fever is an old disease, but it was not until the year 1813 that Brettonneau distinguished as a separate disease entity what had later become known as typhoid fever. It was considered for a long time to be a form of typhus in which the intestinal lesion was only accidental in the course of the malady. Gerhard, an American physician, was the first to show the difference between the two diseases, typhus and typhoid, in a paper prepared in the year 1837. The difference between typhus and typhoid, however, was not generally recognized until the year 1850. Louis of Paris was the first to use the name "typhoid." Osler speaks of the prevalence of typhoid as an index of sanitary intelligence of a community. From an infected person the mode of transmission consists of the three "f's", the fingers, food and flies. The bacillus, the causative factor of typhoid, was discovered by Eberth, from whom it derives its name. During the Spanish-American war and other wars typhoid reaped a greater toll of lives than did actual warfare. During the Great War typhoid was a comparatively negligible factor. Yet, while the disease is controllable, the yearly average of deaths from typhoid in the United States is ten thousand.

No attempt has been made to treat the subject of disease in any exhaustive way. It could not be accomplished in the scope of a paper like this. Osler in his work on "Practice," describes over one hundred diseases and cognate conditions. Enough of the story has been told, it is hoped, to show that the conquest of disease and the growth of population have been coincident with the development of science in general and scientific medicine in particular. The victory has been largely over infectious diseases caused by parasitic life, bacteria and protozoa. The weapons have been sanitation, serum treatment and vaccines, infection prevention and prophylactic surgery in such in-

stances as the removal of tonsils and adenoids.

Probably nothing testifies so unmistakably to the progress of scientific medicine as the growth of world population during the past century and a quarter. At the beginning of the nineteenth century the population of the world was estimated to have been 800 millions. The present estimate places it as over 1,600 million. In other words, the population of the world has doubled within the past hundred and twenty-five years. The population of England and Wales at the time of the revolution, 1688, was not more than five and a half millions. From the Norman Conquest to the beginning of the sixteenth century population had grown from only two to four millions. The growth was of necessity slow owing largely to disease. The population has more than tripled during the nineteenth century. Before the dawn of modern medicine infant mortality was frightful. The birth rate was 36 per 1,000 during the late middle ages and the death rate 24 per 1,000 of population. Life expectation, as estimated by a Frenchman in the early part of the eighteenth century, was placed at 26 years. Medical authorities estimate that during the middle ages it was as low as 21. With the achievements of modern medicine, life expectation in the United States at the present time is 55 years. Nor does this tell the whole story. It was not until 1847 that chloroform was discovered by Sir James Simpson. Before the use of anesthetics there was nothing to mitigate the pains of child labor or those incident to surgical operations. Hospitals were hot houses of infection and to be a patient in one was almost to court death. Not only has there been prolongation of life as compared with former times, but the comforts of living have become more abundant. The humblest citizen can, at low cost, indulge in what was not available for kings in former times at any price.

True, medicine, in which I include surgery, which is but a method of treatment, has done little for cancer, especially in the later stages. Malignant growths are as old as living beings. They are recorded in pre-historic remains. Surgery and the X-rays and radium have contributed towards the eradication in the early stages, but malignancy is still a vexed problem for the medical profession. During the middle ages and even into the early decades of the nineteenth century, death reaped a heavy toll owing to the general ignorance that prevailed. The historic plagues of mediaeval and ancient times were catastrophic in their range and virulence. It would seem at times that the people might be wiped out, or as Tennyson has it:

"Are God and nature then at strife,
That nature leads such evil dreams,
So careful of the type she seems
So careless of the single life."

With the growth of medicine in the conquest of disease there has also developed a social conscience. Probably never before in the history of the world has the altruistic spirit prevailed to the extent it does today. Men are more and more recognizing the fact that they are their brothers' keepers. We see this in organized charities—in municipal hospitals—in the free clinics, which are often abused.

It has been said that the future of mankind will concern the group rather than the individual. It will be social evolution rather than the further evolution of the individual. In this no class or profession will figure to a greater degree than the medical profession. The success of preventive medicine as well as the growth of medicine and surgery in the past will warrant a continuance on the same lines rather than the inauguration of the paternalism of state medicine so-called.

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A GOITRE RESUME*

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For many years, goitre has been recognized as a tumor of the neck affecting man and animals, but only recently has its reaching effects on the cardio-vascular, renal and nervous systems been appreciated. Its distribution is world-wide and no age is exempt.

The following types of non-malignant goitre are recognized: (a) colloid, (b) adenoma, (c) exophthalmic, (d) foetal adenoma, (e) mixed.

The colloid goitre of adolescence causes a tumor of the thyroid, a general apathy and a low basal metabolism rate (usual a minus 10 to minus 15). This type is usually treated by the use of iodine in some form. Dissipated thyroid or thyroxin is given until the basal metabolism changes from a minus to a plus 6 or 7.

The adenomatous goitre causes a tumor.

*Jackson County Medical Society, April 13, 1926.

some cardiovascular symptoms such as tachycardia, and arrhythmia and nervous phenomena which will be discussed later. If goitre is active these patients have an increased basal metabolism rate.

The exophthalmic goitre causes certain well defined early symptoms among which are: (1) eye phenomena, exophthalmos and stare, (2) nervous and emotional states—irritability, (3) muscular symptoms—continually in motion, fine tremors, muscular weakness, (4) gastro intestinal symptoms—vomiting, diarrhea, (5) later, we find cardiovascular, renal and liver changes which will be mentioned in more detail, (6) the basal metabolism rate is greatly increased. Crile urges the removal of all goitres of the foetal adenomatous type because 12 per cent undergo malignant change.

Tachycardia without question is the outstanding symptom of thyroid disease. When a patient presents himself to us and we find a persistent tachycardia, thyroid disease is considered first as the possible cause of this medical problem. Tachycardia must not be considered as an evidence of myocardial disease. In thyroid disease we have an increased basal metabolism as a physiological fact, we must consider this increase of pulse rate at first as a physiological fact rather than a pathological entity. The result of a long continued tachycardia on the heart is that it becomes a "weak muscle."

If we are to accept the statement that a prolonged tachycardia produces a weakened cardiac muscle, we believe that this explains why the heart is affected more constantly in thyroid disease than any other organ in the body. No doubt this is due to the mechanical strain of an over worked muscle and the direct toxic effect of the substance which poisons the heart muscle. The average pulse rate of our hyperthyroidism patients is 118. The over activity is commensurate with the degree of intoxication. Not only is the pulse rate increased, but the blood pressure is elevated even when we find nothing more than a persistent tachycardia.

After prolonged thyroid intoxication, the arrhythmias develop. The most important and most constant is auricular fibrillation. The long period of tachycardia causes fatigue and hypertrophy. In the susceptible hearts there is degeneration as manifested by the clinical findings of dilatation, hypertrophy and arrhythmia rather than the intensity of intoxication which causes such a damage.

A few years ago the goitre surgeon chose his operative cases with great care. With

improved medical preparation of the patient, operation is now safely offered to a greatly increased number of patients who otherwise would be doomed to early death. Today less than 1 per cent are considered inoperable (malignancy included). During the past two years we have not refused operation to any patient. Some required careful medical preparation and considerable post-operative attention. There has been no mortality during this period.

Persistent auricular fibrillation is the most common cause of thyroid death. It occurred in 25 per cent of our cases.

Arrhythmias other than fibrillation occur but they are rare. Premature contractions: paroxysmal tachycardia, delayed conditions, heart block may be mentioned.

TREATMENT

While there has been developed a standardized treatment of active goitre there is yet a wide spread difference of opinion between experience clinicians as to the value of certain forms of therapy. For instance, in the matter of radiation (X-ray and radium). We recently wrote to five of the largest goitre clinics in America to get their present opinion on radiation with the following replies:

"We do not use the X-ray or radium because we feel that the percentage of recurrence, incomplete cures and complete failures, together with the possibility of severe thyroidism occurring during the treatment, contra-indicates it. We employ surgery because we believe it relieves thyroidism most completely, most certainly and most quickly.

"We feel that radio-therapy in certain cases either mild or severe definitely does produce improvement."

"We have failed to see any material benefit from the use of X-ray or radium in the treatment of hyperthyroidism and we are not sure at all that any benefit is received from its use in even mild cases. They use some X-ray.

"We, ourselves are unable to give a definite opinion as to the value of X-ray treatment in our own hands. In our own experience, we are not able to answer the question about radium therapy in mild cases." They use some X-ray.

"We are having returns on quite a number of cases treated with X-ray who now have recurrence of the hyperthyroidism. In addition, there is a certain percentage of

cases who apparently do not respond to radiation.

"In milder cases, I do believe radiotherapy has its place combining it, of course, with the other therapeutic means ordinarily employed in the treatment of these cases, particularly rest, elimination of the foci of infection, etc."

"We use X-ray in early diffuse colloid goitre where no adenoma can be discovered."

Surgery is recommended on an average to only about one goitre patient out of three that we see (in adults). Only rarely should surgery be recommended before twenty years of age.

Malignant goitre will not be gone into.

X-ray treatments to do any good should be given in fairly good doses and repeated every two weeks, usually from three to six treatments. Radium may be substituted if patient cannot be moved to X-ray machine. The mode of application of the X-rays has certain mechanical advantages over radium.

The consensus of opinion seems to be that X-ray causes temporary benefit in most cases of mildly toxic goitre.

OPERATION

The palliative operations such as injections of hot water or quinine and urea hydrochloride, ligations of superior or inferior thyroid arteries are done less often than formerly. The ligations are now used only in the exophthalmic types.

Most goitre surgeons today do the gland resection under local anesthesia, gas oxygen, ethelene oxygen, or a combination of the two.

In the last series of surgical goitres, during the past two years, 8,390 have been operated under local anesthesia. Each case made a good recovery. There are several advantages in local anesthesia. The shock is greatly diminished. One can tell whether the recurrent laryngeal nerves are encroached upon by asking the patient to cough before closing the wound. Fluids can be taken immediately.

Post-operative hemorrhage in goitre is a very embarrassing complication, so the coagulation time of the blood is now a routine procedure before operation.

As Dr. Plummer put it: "Surgery is the ideal treatment for toxic thyroid goitre, surgery is probably the best treatment; at least the patient likes it better."

It is our observation that the patient with a "goitre heart" is a better surgical risk than is popularly supposed. Patients with

hyperthyroidism and bad hearts should not be refused surgical relief. As a comparison, the patient with cholecystitis and a heart as bad as a patient having hyperthyroidism is a very dangerous risk to undergo cholecystectomy or cholecystostomy where as the hyperthyroid cardiopath has a much better prognosis. We regard any prolonged postponement of surgical intervention unfair to the patient. For that matter any prolonged postponement of surgical intervention in any thyrotoxic case is likely to result in permanent myocardial degeneration. The surgical intervention is only one step in the handling of hyperthyroid cases but it is a very important one. The patient must be guided before and after an operation. If the goitre is at all toxic, he must be supervised for a length of time varying from a few days to three or four months before he submits to surgery.

The feeding of exophthalmic goitre patients is an important phase of successful treatment. Since they have a markedly increased basal rate, they must have a liberal caloric diet having an excess of carbohydrates, and just enough protein to prevent a negative nitrogen balance and the diet should be poor in salt.

Eighty per cent of goitre patients are women. Since all patients are nervous and excitable, are irritated by trivial things, are sleepless and emotional, worry and tire easily, these patients do much better when placed in a hospital. Here the home life is shut out and the patient encouraged to rest. As a rule they are antagonistic to hospitalization for a day or two but soon realize they are resting better, that their heart is not beating so fast, etc., and they are willing to co-operate with the schedule proposed.

A general diet rich in carbohydrates and low in protein and salt is ordered. Three thousand c.c. of fluids are ordered daily, (no tea or coffee allowed). Bath room privileges are denied. Visitors are restricted to immediate members of the family and not more than two hours a day allowed them. Soda bicarbonate 10 grs. is given T.I.D. and triple bromides grs. xx or xxx at bed time for a few nights. In the non-toxic cases, operation may be done in two or three days, and the toxic case is held indefinitely under medical treatment until the basal rate is lowered and the symptoms abate. Lugols solution is generally used in all operative cases because of the difficulty in differentiating between diffuse adenomata (hyperplasia) and the hypertrophic or exophthalmic type. Digitalis is only used in auricular fibrillation, the ordinary tachycardia is usually influenced by it, ice bags have a favor-

able effect upon it. This is always discontinued a few days before the operation.

The first 48 hours after operation is the most critical period. It is during this period that the patient must take 3,000 to 4,000 c.c. fluids if they will tolerate them, if not the intravenous use of 5 to 10 per cent glucose without glucose intravenously or subpectorally should be used until the patient tolerates fluids by mouth. Morphia and other sedatives, as well as Lugols solution should be used. The patient as a rule has a stormy time if the surgery has been done under local anesthesia.

The average stay of the patient in the hospital after operation is approximately eight days. They are sent home with definite printed instructions which includes a simple diet, meat free diet, a large water intake, no social functions and a definite rest schedule. Household cares are kept at a minimum, and in the more severe cardiac cases, such activities as stair climbing may be prohibited for weeks.

THE ROLE OF CONSTIPATION IN COLON BACILLUS INFECTIONS OF THE URINARY TRACT

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It is generally conceded that the colon bacillus is the most common, as well as the most obstinate infection of the urinary tract. Cabot states that "the colon-bacillus has been at the bottom of the most persistent problems which the urologist has had to face. We cannot point with pride to our successes here though we may well view with alarm our striking inability to stamp out this infection once it has become firmly rooted." Lowsley considers the colon bacillus infection of the urinary tract as "the bugbear we have to face."

The preponderance of colon bacillus infection of the urinary tract has caused much speculation as to the source of B. Coli infections of the kidneys as well as the channels through which they enter the kidney. Both the urogenous and hematogenous routes have their advocates and much clinical work has been done to prove or disprove either. Inasmuch as this paper has to do with the relationship of colon disturbances and urinary infection of the latter route only will be considered.

David and McGills exhaustive clinical findings prove conclusively that the bowel can be the source of B. Coli infection of the kidneys. Of 11 dogs injected with B. Coli and fat via the stomach tube, 8 were found

to have organisms in the mesenteric glands—6 of which were colon bacillus. They also found that in control dogs with normal intestines, the mesenteric glands contained bacteria in over 50 per cent and the B. Coli were found in 33 per cent of the cases examined. They came to the conclusion, after exhaustive experimental work, that "these facts speak conclusively for passage of organisms from normal bowels to the mesenteric glands."

MacKenzie found that 80 to 90 per cent of persistent urinary infections, exclusive of tuberculosis, was due to infection by the colon bacillus. In a series of two hundred cases of pyelitis he found colon bacillus infection in 94.5 per cent of the cases.

Seventy-five per cent of Schapiro and Wittenberg's cases of renal infection were due to colon bacillus infection.

MacGowan thinks that colonic stasis is an important factor in causing colon bacillus infections of the urinary tract. He assumes that the B. Coli enter the kidney via the circulation or travel via the lymphatics from the bowel to the kidneys. He reports two cases of constipation; one of which was fecal impaction, which, when corrected showed a speedy regression of the pyelitis.

Heitz-Boyer believes that functional disturbances of the bowel, as constipation, are largely responsible for colon bacillus infection of the kidneys. He isolated the B. Coli organism from the blood stream in three cases which he thought was intestinal in origin, as he naively states the disease was healed by small doses of castor oil.

Cabot is of the opinion that "constipation and varying degrees of visceral ptosis are common and may well result in throwing colon bacilli into the circulation more commonly than we believe. It will, I think, well repay study in order to determine how frequently palpable abnormality of function of the large intestine is associated with bacilemia and bacilluria."

French believes that the colon bacillus reaches the kidney through the blood stream from the bowel during constipation.

Czerny and Moser contends that gastroenteritis is a disease of general infection in which the bacteria enter the blood stream, from the bowel, causing renal infection.

Hornemann thinks that in case of human beings the organisms get into the blood stream from the intestinal tract only or when lesions of the bowels are present.

MacKenzie says "a close relation between infectious diarrhea and colon pyelonephritis in infants is well recognized. Intestinal bacteria may be taken up by the lymphatics of blood vessels from ulcerations in the mucosa

and in the end reach the blood stream to be exerted by the kidneys, producing a pyelonephritis."

Jeffreys reports 121 cases of pyelitis of whom 34 had definite evidence of bowel disturbance. According to Kretschmer, Asch was able to produce bacteriuria in dogs by feeding them opium so the bowels were locked up from 7 to 10 days. Without any treatment other than opening the bowels the bacteria disappeared promptly. He also states that "lesions of the intestinal tract may be a predisposing factor in the production of renal infections by the colon bacillus—many of these patients have a history of colitis. Many cases occur in the children's hospitals during the summer time, when gastrointestinal disturbances are common in children. Some of our cases have had disturbances of the colon, and treat them as we would, we have been unable to make any progress until the colon conditions were corrected." Bohr found *B. Coli* in the blood in 115 cases of bowel disturbances. Herbst reported a bilateral *B. Coli* pyelitis in a woman suffering from colitis. Of the 80 cases of pyelitis in children reported by Friedenwald, 59 had bowel disturbances, whereas among the 68 cases of pyelitis in children and 92 per cent of the 40 cases of pyelitis reported by Kowitz showed a *B. Coli* infection associated with gastro-intestinal disturbance.

According to Schapiro and Wittenberg "Colon bacilli penetrates the health mucus membrane of the intestines after two days of constipation; and when the mucus membrane is diseased the passage of these germs into the blood is still easier." The exhaustive experimental work of David and McGill gives much valuable information on the relation of the bowels to *B. Coli* infection of the urinary tract. Experimental clinical observations have brought them to contend that "the significance of the passage of intestinal organisms through the normal, as well as pathological, bowel wall to the mesenteric glands cannot be overlooked—while it is undoubtedly true that these organisms reach the blood stream in but relatively small numbers and inconstantly, it is nevertheless possible that increased virulence of the organisms, lowered resistance of the host, as well as actual lesions of the bowel wall would greatly increase this number of organisms reaching the blood stream. The conclusion would accord with the clinical relations of gastro-intestinal lesions and urinary tract infection.

Of a series of 212 cases of pyelitis examined by us at the Battle Creek Sanitarium, 111 or 52 per cent were colon bacillus in-

fection. Of these cases 66 were women and 45 were men. The infection was bilateral in 67 cases—66 per cent, whereas in men it occurred in 27 or 34 per cent of cases. In cases of unilateral renal involvement of the *B. Coli* infection there were 12 cases of right renal infection and 14 cases of left in women, compared with nine cases of the right and nine cases of the left kidney involvement in men.

Fecal examinations made in 50 cases of colon bacillus infection of the urinary tract, 16 of which were men and 34 women, showed a preponderance of the bacillus *Coli* group in all the tests—the average flora on entry was 29.6 per cent gram positive bacteria of which the bacillus *Acidophilus* more or less predominated the group, and 70.4 per cent gram negative bacteria, which were chiefly the colon bacillus group, whereas after an average of three weeks' treatment the flora was 40.2 per cent gram-negative and 59.9 per cent gram-positive bacteria. The average flora of 35 urological cases of colon bacillus pyelitis on entry was 22.3 per cent gram-positive and 77.7 per cent gram-negative for men and 72.9 per cent gram-negative bacteria and 22.3 per cent gram-positive for women. After an average of two and one-half weeks' treatment for men and three and one-half weeks' treatment for women the average flora was 49.4 per cent gram-negative and 56.6 per cent gram-positive bacteria for men and 44 per cent gram-negative and 56 per cent gram-positive bacteria for women. The minimum period of treatment was one week, whereas the maximum treatment was thirteen weeks.

In four of our cases the urine was positive for colon bacillus after three weeks treatment. In approximately 30 per cent of our cases of colon bacillus infections of the urinary tract the bladder findings were negative, whereas in 50 per cent of the cases the bladder findings were of variable degrees of cystitis or trigonitis leaving but 20 per cent with the more pronounced types of vesical pathology. The form of treatment used in 36 cases of *B. Coli* infection of the urinary tract associated with constipation was as follows:

No. of cases, 2; Type of treatment, low protein diet only; Actual duration of treatment when urinalysis was negative for *B. Coli*, 2½ weeks.

No. of cases, 8; Type of treatment, renal pelvic lavage with Ag. No. 3 plus non-toxic low protein diet; Actual duration of treatment when urinalysis was negative for *B. Coli*, 3 weeks.

No. of cases, 20; Type of treatment, low protein non-toxic diet—colon treatment—lactose dextrine and mineral oil; Actual duration of treatment when urinalysis was negative for *B. Coli*, 2¾ weeks.

No. of cases, 6; Type of treatment, low protein non-toxic diet—colon treatment—lactose dextrine—

mineral oil and pelvic lavage with Ag. No. 3, 2½ weeks.

From the preceding table it can be readily seen that the results in treating our colon bacillus infections of the urinary tract were obtained when suitable therapeutic measures were instituted to take care of colonic conditions as well as the uropoietic tract. We are convinced that the source of a large per cent of *B. Coli* infections of the urinary tract is intestinal, hence the treatment thereof is of a necessity a two-fold proposition, which must be considered in order to obtain the best results.

The following case is submitted as an average case that comes to us and upon examination was found to have a bilateral colon bacillus infection of the urinary tract:

Mrs. M., married, age 35, Canadian. She was referred for urological examination 5-30-23 and gave the following urological history. She had intermittent attacks of cystitis with urgency, frequency, and localized sharp pain in the bladder neck at the termination of urination. Seldom got up more than once a night to avoid urine. This condition grew gradually worse the past year, and recently has been more or less continuous. Has lost 5-6 pounds the past year. Appetite poor. States she "has a feeling of weakness in the small of the back occasionally."

The cystoscopic picture was that of a moderate trigonitis with numerous vesicula cystica desseminated over the trigone and bladder neck. Both ureteral ora were well defined and excepting from some congestion, were normal in appearance. No. 5 catheter were passed up both ureters about 6 inches when resistance prevented further progress. The segregated urine was free and equal and clear and colorless from both kidneys. In the PSP test the dye appeared from the right kidney in two minutes and in four minutes from the left with a percentage of 10 from the right and 11 from the left in 15 minutes collection with but a trace from the bladder. The plelogram of the right kidney showed a moderate dilation of the pelvis and the lower calyx.

Laboratory test showed many gram-negative bacteria, *B. Coli Mucosus Capsulatus*, and diphtheroid infections in both kidneys. T. B. microscopic and guinea pig test were negative. A diagnosis of bilateral pyelitis was made and pelvic lavage with silver nitrate plus urotropin and acid sodium phosphate recommended.

Laboratory tests were as follows:

Urine quantity, 700 c.c.; sp. gr. 1.015; Reaction, 60 x; NH₃ .295; Bergell, 0; Alb., Tr; Indican, 3; Indol Aac, x; Toxin test, plus; casts, 0; plus cells many; blood cells, 0; crystals, etc., 0.

Feces 6-1-23—*B. Welchii*, X; Odor putrid; *Baca. B. Coli* xxx; Micro. Flora, 15/85; Character, very bad.

Feces 6-20-23—*B. Coli* x; Odor, sour; Bact. B.; *Acidophilus*, x; Micro., 35/65; Character, mixed; Yeast, x.

Bacteriological examinations of tonsils 5-16-23, shows:

Non-hemolytic strept; *Staph. aureus*; pneumococci; gram-neg. bact. pus cells and debris. Protological examination 5-12-23, showed con-

siderable highly putrid feces present; several fairly large congested internal hemorrhoids, mucosa anemic. Bowel wall atonic and greatly relaxed. Colon treatment.

Treatment—Patient was put on general tonic hydropathic treatments together with colon treatments, consisting of colon massage, electrical treatment and culture consisting of *B. Acidophilus*, *B. Bifidus* and *B. Lalticus*. She was also given agar and mineral oil. Hexamethylene and alidi sodii phosphate as grs. V. after meals and at bedtime; also had the kidney pelvis treated with Silver nitrate 1-1000 solution every four days. As noted in the urinalysis 5-15-23, there was every evidence of putrefaction in the colon: A subsequent urinalysis made 6-6-23, was negative for indican indol acetic acid and toxin test, whereas the fecal test when first made 1-1-23, showed a flora of 15 per cent gram-negative bacteria and 85 per cent gram-positive bacteria. In three weeks of treatment it was changed to 35 per cent gram-negative and 65 per cent gram-positive bacteria. The laboratory reported the segregated specimen obtained 6-18-23, as containing gram-negative bacteria from the right kidney whereas the left was negative. Another specimen obtained 6-24-23, showed the urine from both kidneys negative for bacteria. The patient went home 6-29-23, "wonderfully improved; gained six pounds, less nervous, bowels moving well, and everybody commented upon my improvement."

This case serves to illustrate one of a large per cent of cases of colon bacillus infections of the urinary tract that come under our observation which is apparently of intestinal origin. Most of these cases that were obstinate to direct kidney treatment alone by way of pelvic medication, via the ureteral catheter, even when supplemented by the use of urotropin, responded more readily when measures were instituted to change the intestinal flora. It is obvious that diet must be of primary consideration. We find the low protein, non-toxic laxative regime best suited for this purpose. Especially when augmented by a suitable pabulum that favors the acid forming bacteria such as, the acidophilus which is primarily indigenous to the colon. Either milk sugar (Lactose) or dextrine given in large dose frequently is recognized as the best media for this purpose. We use a mixture of both lactose and dextrine, together with an extract of lemon for the vitamine content. Our experience has been that persistent colon bacillus infection of the urinary tract is invariably associated with some form of intestinal disturbance and that in order to insure the best and most protracted cures in these cases, colon hygiene and the changing of the intestinal flora must be considered.

It is generally conceded that the course of a mild colon bacillus infection varies. It may disappear promptly or the disease may last for years without apparent inconvenience to the patient, as long as the patient's health and general vitality is good, however, there is always the danger of more severe in-

volvement of the kidneys once the resistance is lowered and the infection gets more virulent. Our experiences concur in MacFowan's observations "that these cases of colon bacillus infection of the kidneys and bladder persisting and unyielding to treatment are invariably due to colonic stasis of the fecal current," and that the only logical manner these obstinate cases can be successfully dealt with is, in addition to the urological treatment, through the institution of colonic hygienic measures; to change the flora from the putrefaction residuum harboring the colon bacillus to one of acid medium favoring the *Acidophilus*, and a dietetic regimen preventing the reoccurrence of said putrid state. A diet that can only be found in the vegetarian dietary.

CONCLUSIONS

1. A big per cent of all colon bacillus infections of the urinary tract have their source in some form of intestinal disturbance.
2. There is definite relationship between protracted constipation and associated *B. Coli* infections of the kidney and bladder.
3. In order to treat persistent colon bacillus infections of the urinary tract successfully, colonic conditions such as diarrhea and constipation must be first taken care of.
4. Colon hygiene is an essential in the treatment of persistent *B. Coli* infections of the urinary tract.
5. Changing the intestinal flora by means of lactose or dextrine materially augments the cure of Colon bacillus infections of the urinary tract.
6. The vegetarian regimen is best for preventing a putrefactive flora, and for maintaining the acid forming bacteria when once changed.

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THE SIGNIFICANCE OF BLOOD IN THE URINE*

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Reason for choice of topic—When the invitation to address this Section was received the writer conferred with your Secretary, Dr. Burr, as to the desirability of speaking on a subject which would not only be of interest to the general surgeon, but equally as much to the gynecologist, internist or even general practitioner who might attend your meeting. We reached the conclusion that no topic of borderline importance could compare with that of what the presence of blood in the urine means and why it calls for an immediate investigation as to its source.

With the exception of highly specialized branches, such as the eye, ear, nose and throat, the remainder of the profession comes in almost daily contact with hematuria either in microscopic or naked eye form.

Why is blood in the urine often considered unimportant?

How does it happen that we are consulted about a hematuria and postpone any further search for its source because it stops after giving some local or general treatment?

I shall attempt to tell you why. Many hematurias cease spontaneously as suddenly as they have appeared. They are seldom accompanied by symptoms which would be of aid in localization and the physician who is first consulted, not being equipped like the urologist with special diagnostic resources, treats the patient medically and dismisses the significance of the blood in the urine from his mind. Both patient and physician are thus lulled into a false sense of security until the hematuria either recurs, becomes persistent or other symptoms appear which indicate that the golden time for treatment, e.g. of a bladder cancer has passed.

It is most unfortunate that so many hematurias appear unaccompanied by any localizing symptoms and even more sad that the majority of hematurias stop spontaneously as suddenly as they appeared.

These clinical characteristics are more to blame than any other factor for the still unsatisfactory end results in the treatment of many lesions of the urinary tract in both sexes and of the genital tract in the male.

It is timely therefore to urge you to re-

*Read at the May 25, 1926 meeting of the Surgical Section of the Wayne County Medical Society at Detroit, Michigan.

gard every hematuria, be it visible to the naked eye or only under the microscope, as a danger signal which calls for an immediate investigation as to its source.

SOURCES OF BLOOD IN THE URINE

It will be impossible in the time allotted to this paper to discuss in detail every possible pathological condition which may give rise to blood in the urine. I shall, however, attempt to show some of the principal lesions of the urinary tract in both sexes in a series of slides by means of which you will be able to visualize the many possible sources of hematuria which we are able to find by modern urologic study of a patient. In addition to those in the genito-urinary tract proper, there are a number of others which we must constantly bear in mind lest we commit the error of making an erroneous diagnosis of localizing the hematuria in the genito-urinary tract whereas in reality the underlying condition is one outside of these structures. We have been impressed during recent year with the importance of systemic diseases as a potential source of hematuria as well as certain viscera, especially the appendix, being the direct cause of this symptom, under pathological conditions. We may, therefore, group the possible sources of hematuria thus:

1. Systemic causes.
2. Appendicitis, vicarious menstruation, etc.
3. Conditions in the genito-urinary tract.

I will only enumerate those which are most commonly found and would suggest this division in searching for a cause in a given patient.

1. Systemic causes, (See foot note).
 - (a) Hemophilia.
 - (b) Erythemia (Polycythemia vera).
 - (c) Purpura hemorrhagica.
 - (d) Leukemia.
 - (e) Scurvy.
 - (f) Hodgkin's Disease and Lymphosarcoma.

(g) Hematuria after high protein diet and exercise.

(h) Hematuria in acute systemic infections.

2. Pathological conditions of adjacent viscera, (See foot note).

- (a) Appendiceal hematuria.
- (b) Vicarious menstruation.

3. Pathological conditions in genito-urinary tract proper. These will be enumerated

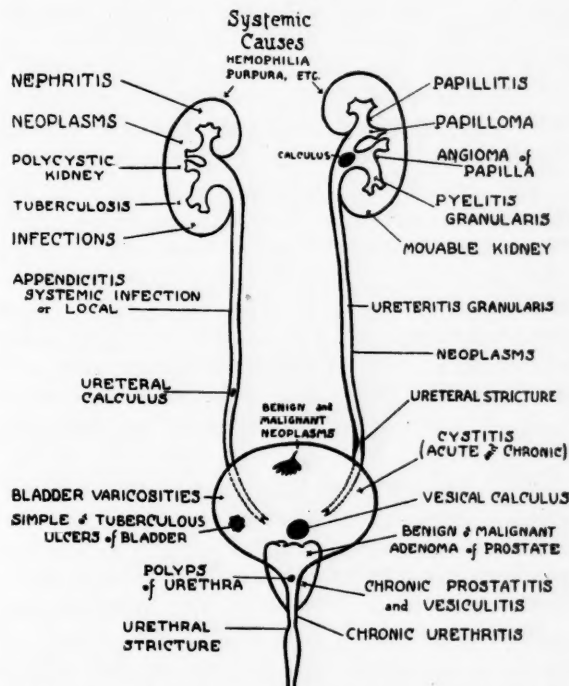
in the sequence in which we look for them in our urologic study of a case.

(a) Urethral, (Fig. 1). Chronic anterior or posterior urethritis, urethral stricture polyps (especially in vicinity of verumontanum) varicosities or hemangiomata.

(b) Seminal vesicles and prostate, (Fig. 1). Chronic vesiculitis ((bloody semen), chronic prostatitis (bloody secretion spontaneously evacuated into urine or found especially after massage. Malignancy of vesicles or of prostate. Carcinoma (primary or by extension) of urethra.

(c) Vesical, (Fig. 1). Polyps of internal urethral meatus, acute and chronic (more common) cystitis, benign adenoma and also carcinoma of the prostate, calculus (usually complicated by cystitis), simple or tuberculous ulcers, varicosities over prostate or

Sources of Hematuria



other portions of vesical mucosa, benign and malignant tumors arising either primarily from bladder wall or extending into the latter from inflammatory or malignant lesions of adjacent structures (rectum, internal and external genitalia of female).

(d) Ureterorenal*. Strictures of the ureter with resultant renal changes, ureteral calculi, neoplasms arising either primarily in the ureter (rare) or extending by implantation or contiguity from the kidney, or paraureteral structures (uterus, etc.), and finally ureteritis (primary or secondary to a descending renal or ascending visceral infection or to extension from some structure

Foot Note—For a more detailed discussion of the various sub-headings in groups 1 and 2, the reader is referred to my article on hematuria in Journal of American Medical Association, Vol. 86, page 825, March 20, 1926.

*It is advisable to group these together because the conditions in the ureter are so often secondary to those of the kidney and vice versa.

which may lie in close contact like the appendix). (Fig. 1).

Renal conditions, such as chronic non-tubercular pyelonephritis (especially pyelitis granularis), neoplasms (papilloma or papillary carcinoma) arising from the renal pelvis, calculi in the pelvis proper or in the calyces, movable kidney, angiomas or varicosities in the papillae, congenital polycystic disease of the (usually of both) kidney parenchyma, renal tuberculosis (Fig. 1), benign and malignant neoplasms of the parenchyma and last, but not least, acute and chronic nephritis.

HOW TO FIND THE SOURCE OF THE HEMATURIA

At first glance it would appear to be an impossibility to eliminate one after the other of the many sources just enumerated. I will grant that at times it requires an immense amount of perseverance to do so. If, however, we approach the problem in a systematic manner, its apparent difficulties rapidly disappear. We follow a certain routine of which only the bare outline will be given.

1. A detailed clinical history paying especial attention to the following:

(a) Is there a history of familial bleeding or of excessive hemorrhage from slight wounds, unusual parts of the body. (breasts), of extensive subcutaneous ecchymosis after insignificant injuries. These give information as to hemophilia and other systemic causes of hematuria. It must not be forgotten that such a systemic cause can coexist with a local one, such as renal tuberculosis.

(b) How long has the hematuria existed? Did it appear spontaneously and without accompanying symptoms (symptomless hematuria)? Did it stop spontaneously and how long was the interval before it recurred, if this has taken place? If it has been continuous, what is the length of time it has been so?

(c) Relation of urinary findings to act of urination. Was the blood only found in microscopic amounts and accompanied, or not, by other elements such as albumen, casts, pus, etc. Was the blood visible first, or at any time, to the naked eye in the urine or escaping from the urethra? Does it precede, continue throughout, or only follow urination and is it accompanied by pain in the kidney, ureter, bladder or urethra. Does it follow exertion or coitus, etc?

It was formerly believed that if the blood was intimately mixed with the urine that the lesion was in the kidneys and if it seemed fresh and in clotted form, that its origin was in the bladder or urethra. With the advances in diagnosis made by modern

urology we now know that these clinical appearances are of some value but not to be compared with the more exact methods of localization.

(d) The next information to be obtained is as to whether or not the hematuria preceded, accompanied or followed an attack of appendicitis. Blood in the urine is such a frequent concomitant finding in all stages of appendicitis that the special name of "appendiceal hematuria" is in common use. It can occur even when there is no intimate relation between the appendix and ureter due to a glomerular nephritis as the sequel of a systemic infection from the diseased appendix. This is in all probability a more frequent cause of the microscopic, or macroscopic presence of blood in the urine in such cases than is direct extension of the infection from the appendix to the ureter.

In addition to such contiguous structures as the appendix and internal genitalia of the female as possible sources of hematuria, we must not forget that it may occur as a form of vicarious menstruation.

In a series of 201 cases collected by Roth it was from the bladder in nine and from the kidney in two cases. Loenne¹ has recently reported a case in which a woman of twenty-six, shortly after the removal of a right sided ovarian cyst and bilateral hematosalpinx, began to have severe backache and hematuria for twenty-four to thirty-six hours every four weeks. He could see through the cystoscope a hyperemia of the bladder mucosa and also the escape of blood from one of the ureters.

UROLOGIC STUDY OF THE CASE

2. Although the value of a carefully taken clinical history is not to be underestimated, the essential step in every case of hematuria is a thorough examination of the genito-urinary tract in both cases. Since Locke and Minot have directed our attention to the importance of systemic causes of hematuria we have routinely asked an internist to examine the patient's cardiovascular system, blood, etc. in order to ascertain whether the cause of the hematuria is outside of the genito-urinary tract.

To describe all of the many steps of a complete urologic study is beyond the scope of this paper. Such an examination should include, in the order named, direct inspection of the urethral and vesical mucosa and ureteral catheterization, supplemented by functional tests, bacteriologic, chemical and microscopic examination of the urine from each kidney, plain radiography and ureteropyelography. Before we undertake the local

1. *Zentralblatt für Gynaekologie* 49, 1129, 1925.

we always subject the patient to a complete physical examination of the abdomen, rectum and genitalia (external and internal) and have the blood chemistry determined as to percentages respectively of urea and creatinin.

In closing let me make a plea to regard every hematuria, be it microscopic or macroscopic, as a danger signal. It is our duty to the patient to have a thorough examination made along the lines just outlined in order to determine whether the condition is one requiring operative interference or not. Our percentage of unfavorable end results with bladder tumors, as only one of many instances, would not be as large if every case of hematuria, whether accompanied or not by other symptoms, were subjected at least to cystoscopic examination.

Among the Books

A Review and Frank Appraisal of Medical Books That are Proffered to the Profession by Publishers.

BEAUMONT FOUNDATION LECTURES. Subject: The Thyroid Gland. Charles H. Mayo, M. D., and Henry Plummer, M. D. Cloth 83 pages. Price, \$1.75. C. V. Mosby & Co., St. Louis, Missouri.

The profession is fairly well acquainted with the Foundation Lecture Committee of the Wayne County Medical Society. Under the auspices of this committee Doctors Charles Mayo and Henry Plummer delivered the 4th lecture on the Thyroid Gland which is available for the profession in book form.

The able authors have covered the history, anatomy, physiology, bacteriology, and the other outstanding factors entailed in thyroid gland in this lecture in a manner which is most thorough and interesting. We can frankly state that never have we read such a concise, such a constructive as well as instructive discussion of this subject and we urge most heartily the wide distribution of this lecture that will prove to be most helpful to every medical man.

DISEASES OF THE SKIN: Richard L. Sutton, M. D., 1,300 pages, 1,147 illustrations. Sixth edition. Cloth, price \$12.00. C. V. Mosby & Co., St. Louis, Missouri.

This sixth edition which spans a space of two years since the publication of the 5th edition establishes more firmly than ever the right to be classified as the leading text on American Dermatology. It is thoroughly revised, enlarged, and the discussions enhanced so that the text is an up-to-date presentation of the subject. The illustrations and style of discussion leave nothing to be desired. I commend the text most highly.

ABT'S PEDIATRICS: By 150 specialists. Edited by Isaac A. Abt, M. D., Professor of Diseases of Children, Northwestern University Medical School, Chicago. Set complete in eight octavo volumes totaling 8,000 pages with 1,500 illustrations, and separate Index Volume free. Now ready—Volume VIII containing 1,102 pages with 388 illustrations and General Index to Volumes I to VIII. Cloth, \$10.00 per volume. Sold by subscription. W. B. Saunders Company, Philadelphia and London.

This eighth volume completes this set which now is recognized as the most modern American authority on pediatrics. This eighth volume maintains the high

standard of all the other volumes and is accompanied by a separate bound index of the whole series that enables one to very readily find that which he is seeking.

The author collaborators and the publishers are entitled to the many thanks of the American profession for having so placed at their disposal this reference authority on pediatrics. No practitioner or no individual in the several branches of medicine can afford to be without this set for reference in his daily work.

SURGICAL ANATOMY OF THE HUMAN BODY: John B. Dever, M. D. 551 pages. Vol. I. E. Blakiston's & Co. Philadelphia.

This is the first volume of the second edition of this text and covers the scalp, skull, brain, face, mouth, throat and the organs of special sense. Twenty-five years have elapsed since the original appearance of the first edition of this text. Greater emphasis has been placed upon surgical anatomy of the regions covered. As a result the text has been largely rewritten.

It is a rather trite statement that he who attempts surgery must be founded in anatomy. We desire to reiterate that statement and to further state that the basis of skillful surgery rests upon an understanding of anatomical principles and physiological functions. The ordinary text on anatomy is of value to the student but he who hold forth in the surgical field requires a greater intimate knowledge of detailed anatomy. That condition is covered by this wonderful text. The author is widely and favorably known, an outstanding man in the surgical world. The wealth of experience that is his in surgical practice is injected in the anatomical discussions that the text imparts. We know at the time of no other anatomical surgical writing that equals this work. We further know and positively so, that no surgeon can afford to be without this extremely valuable publication. It is well illustrated, clear in diction, arranged in pleasing form and outlines well the anatomical relations that are met in given operative procedures. We congratulate the author and publishers and express appreciation for providing this edition of Surgical Anatomy for the profession.

UROLOGY: O. S. Lowsley, M. D. and T. L. Kirwin, M. D. Cloth, 699 pages. 233 illustrations. Price \$10.00. Lee and Fibiger, Philadelphia.

This text book is based upon the 11 years' study which its authors have devoted to laboratory research and clinical experiences and diagnosis and treatment of the diseases incorporated in this specialty. A careful perusal of the volume, the method in which each subject is presented, the diagnostic measures employed, the therapeutic and surgical treatment compel the conclusion that this is an excellent guide and a practical presentation of the subject. We are particularly impressed with the splendid manner in which assistance is imparted to the reader. This text is bound to be accepted as a standard work in this subject and is so commended.

EXPERIMENTAL PHARMACOLOGY AS A BASIS FOR THERAPEUTICS: H. H. Meyer and R. Gottlieb. With English translation by E. E. Henderson.

This is the second American edition of the seventh German edition of a well known text. We have not much to say in the way of criticism or comment other than that the contents is consistent with our modern understanding of therapeutics and that it implies the intelligent exhibition of therapeutic remedies based upon functional results and consequently obtaining the greatest benefit from the administration of various drugs.

(Continued on Page 370)

PUBLIC HEALTH ACTIVITIES

Edited By
MICHIGAN DEPARTMENT OF HEALTH

WHERE MICHIGAN STANDS

The value of all things is established by comparison. The size of a thing is not so important in itself as in its relation to other similar things. A thing may be very small in itself but when compared with similar things be very large. So it is true with our vital statistics rates.

A few years ago a rate of 150 for tuberculosis was not considered high because many communities showed a higher rate, but today when most communities show a lower rate it would be considered high.

Comparisons are odious perhaps, but sometimes they act as a damper on our egotism.

The 1925 figures for 31 of the states have just been released and it seems well at this time to study carefully WHERE MICHIGAN STANDS in comparison with the other states.

That there has been a decided falling of the birth rate is evident. The rate for 31 states falling from 22.6 per 1,000 population

mean that there were 168,000 fewer births in 1925 than in 1924. In Michigan the rate fell from 24.1 in 1924 to 23.1 in 1925. It is of interest to observe that the decrease was not as great in Michigan as it was in the United States as a whole.

In rank, Michigan held sixth place, being exceeded only by Kentucky, Mississippi, North Carolina, Virginia and West Virginia. These are all southern States and the southern birth rate is always higher than in the north. The highest birth rate was in North Carolina, 28.8, but this shows a fall from 32.2 in 1924.

The lowest rates were in Montana, 15.1, Washington, 16.4, Oregon, 17.9, Connecticut, 18.9 and Illinois, 19.1. A very few years ago a rate of less than 20 was considered sufficient evidence that births were not reported well, but it may be necessary to revise this conclusion. This is illustrated in Figure 1.

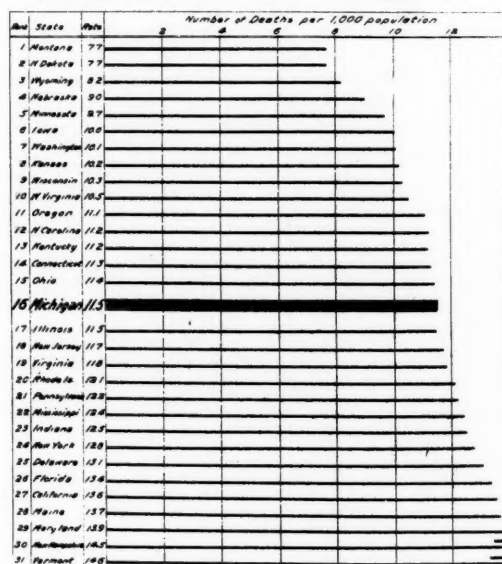
Professor George C. Whipple frequently said that the acid test of public health work was the death rate. For the 31 states this

Michigan Department of Health
WHERE MICHIGAN STANDS
Comparison of the 1925 BIRTH RATE
with the other states



in 1924 to 21.2 in 1925, a decrease of 1.4 per 1,000 population. If this rate would apply to the whole United States with an estimated population of 120,000,000 it would

Michigan Department of Health
WHERE MICHIGAN STANDS
Comparison of the 1925 DEATH RATE
with the other states



shows a reduction from 11.8 per 1,000 population in 1924 to 11.7 in 1925, Michigan being reduced from 11.6 to 11.5, but in comparison with the other states, Michigan

stands fairly in the middle, ranking number 16 with 15 states higher and 15 states lower. Among the central and eastern states showing lower rates are Minnesota, 9.7, Wisconsin, 10.3, and Ohio, 11.4. Among those showing higher rates are New Jersey, 11.7, Pennsylvania, 12.2, Indiana, 12.5, New York, 12.8, Maryland, 13.9, and Vermont, 14.6. It must be considered that these are crude rates and no allowance is made for any factor which might influence the death rate. When we consider the character of the Michigan population with the distortion of the age distribution and variety of race stocks, it is satisfactory to see the rate below that of the United States Registration Area and lower than many of the states having well organized and effective health departments. This is illustrated in Figure 2.

In the infant mortality rate the showing of Michigan is not so good, ranking 21st place of 31 states. For the whole group the rate rose from 71.0 in 1924 to 71.5 in 1925; Michigan increasing from 72.3 to 74.5. The only comparable state showing a higher rate was Pennsylvania, 82.0. Among the states showing more favorable rates are Wisconsin, 67.1, New York, 67.3, Indiana, 67.9, Ohio, 69.7 and Minnesota, 60.4.

These rates are based on the number of deaths of children under one year of age per 1,000 living births and with fair report-

Michigan Department of Health ^{Fig. 2}
WHERE MICHIGAN STANDS
Comparison of the 1925 INFANT
MORTALITY RATE with the other States

Rank	State	Rate	Number of deaths of Children under 1 year per 1000 births				
			20	40	60	80	100
1	Oregon	51.2					
2	Iowa	53.9					
3	Washington	58.5					
4	Nebraska	59.4					
5	Minnesota	60.4					
6	Kansas	61.6					
7	Wyoming	63.9					
8	Wisconsin	67.1					
9	New York	67.3					
10	Indiana	67.9					
11	Mississippi	68.5					
12	California	68.7					
13	New Jersey	68.9					
14	Montana	68.6					
15	Ohio	69.7					
16	Kentucky	70.4					
17	Illinois	72.5					
18	Rhode Island	72.8					
19	Vermont	72.8					
20	Connecticut	73.5					
21	MICHIGAN	74.5					
22	Florida	75.3					
23	New Hampshire	76.2					
24	N. Dakota	76.4					
25	Maine	76.7					
26	N. Carolina	78.0					
27	W. Virginia	78.8					
28	Virginia	80.6					
29	Pennsylvania	82.0					
30	Delaware	80.3					
31	Maryland	80.4					

ing of births are accurate, as there is not the factor of error in population estimates as in birth and death rates. These are illustrated in Figure 3.—W. J. V. D.

SWIMMING POOL WATER STERILIZATION

The sanitary quality of swimming pool waters is becoming a health question of increasing prominence. This being an age of standardization we immediately ask for some criterion whereby the sanitary quality of a swimming pool water may be judged. The present standard recommended by the committee on bathing beaches at the 4th Annual Conference of State Sanitary Engineers at Washington in 1923 for the bacterial quality of water is given in sections 6 and 7 which are as follows:

Section 6. Bacteria count on agar or litmus lactose agar—24 hours—37° C. Not more than 10 per cent of samples covering any considerable period shall contain more than 100 bacteria per cubic centimeter. No single samples should contain more than 200 bacteria per cubic centimeter.

Section 7. B. Coli—Partial confirmed test. Not more than 2 out of 5 samples collected on the same day, or not more than 3 out of 10 consecutive samples collected on different dates to show a positive test in 10 cubic centimeters of the water at time when the pool is in use.

How shall we meet this standard? Sterilization is the answer, but here again we are questioned, how shall we sterilize? At present there are two common methods in use, namely, with ultra-violet rays and chlorination.

The ultra-violet ray process employs the mercury arc as a source of its rays. Sterilization is accomplished by bringing the polluted waters in direct contact with the rays. A limitation however exists in the use of ultra violet rays as an ideal swimming pool water sterilizer as the residual bactericidal effect is negligible. The results are that the incoming sterile water from the ultra violet ray machine on being brought in contact with the polluted pool waters merely dilutes the pollution in the pool instead of prohibiting it. This is an objectionable feature and can be best combated at those places where ultra-violet ray machines are employed by allowing the machine to run continuously, thus insuring a safe water for the beginning of the succeeding day. However, even with this precaution a certain degree of pollution will exist in the pool waters as soon as bathing begins the next day. In other words, a pool depending on ultra-violet rays as its sterilizer always has some degree of pollution in its waters while bathing is in progress, and does not rid itself of this pollution until the entire contents of the pool has been recirculated one or more times. In this type of poolen-

ture recirculation occurs about every eight hours.

Sterilization by the application of chlorine may be accomplished in two ways, by dosing a chlorine solution obtained by dissolving calcium hypochlorite in water and by direct application of chlorine gas.

The application of a chlorine solution is rather cumbersome and therefore limited in its usefulness. The strength of chlorine in a given dose is always a matter for discussion while the application of the chlorine to the pool water requires sufficient work to be easily overlooked by the attendants. Its greatest use lies in the sterilization of the fill and draw type of swimming pool tank waters.

The ideal sterilizer for swimming pool water is afforded by the direct application of chlorine gas. The chlorine gas may be accurately measured and controlled by a mechanical device called a chlorinator which is, under normal conditions, simple to operate. Chlorine gas when dosed into the pool water in right proportions provides a residual bactericidal effect of sufficient strength to prohibit all pollution. The amount of residual or excess chlorine in the water at all times and at all points when the pool is in use should not be less than 0.2 p.p.m. nor more than 0.5 p.p.m.

Bacteriological controls are essential to good operation in all types of swimming pools while in the case of chlorinated pool waters an o-tolidin test should be made daily to ascertain the amount of residual chlorine present in the water.—R. J. F.

OIL POLLUTION A GROWING MENACE

Modern manufacturing methods and the automobile call for the use of large quantities of oil as fuel and as a lubricant. This increased use of oil has brought about a problem of oil waste disposal, a solution of which does not appear to have been attempted to any great extent.

The practice of discharging oil into sewers and hence to the rivers and lakes is growing rapidly. This form of pollution is a menace to the public health, comfort and welfare in a number of ways. Oil spreads over water in a thin film, preventing it from coming in contact with the air and thus hindering aeration, a process necessary to the life in the stream and to the self purification of the water of the stream. It forms a covering over the shores and kills the vegetable growth both in and out of the water. It makes the stream absolutely unfit for bathing and swimming purposes. In cities where the water front is used for shipping purposes

the oil collecting around the boats and docks constitutes a great fire hazard.

This oil pollution has been growing rapidly during the last year. Observations and inspections have indicated that more and more oil is being disposed of by this method of least resistance and is now present in such proportions as to be termed one of the greatest, if not the greatest, form of pollution. Most forms of pollution are taken care of in time by the processes of the stream. Oil pollution is accumulative.—E. F. E.

SWABS FOR EXAMINATION FOR TUBERCULOSIS

In the Journal of the American Medical Association for March 27, 1926, an article entitled "Sputum Examination in So-Called Closed Tuberculosis" was published. This recommended a technic for obtaining material by means of swabs from patients with tuberculosis involvements in the absence of expectoration.

Since the article appeared, the laboratory of the Michigan Department of Health has received several swabs for the examination of tuberculosis, presumably taken in the manner suggested. These, however, by the time they are mailed to the laboratory, have been too dry for making satisfactory stained preparations. It is only after soaking the swabs in saline and centrifuging the solution that material for microscopic examination can be obtained.

It has been suggested, then, that if the doctor would smear his swab on several glass slides while the material is still moist, the presence of the tubercle bacilli could be demonstrated much more often than by sending the swab to the laboratory. Swabs should not be sent except in cases where no sputum can be obtained.—L. M. R.

ONE CITY'S WATER SUPPLY PROBLEM

The public water supply for the city of Greenville, Michigan, is pumped from wells 35 to 45 feet deep. The wells are located in an outwash plain along the Flat river and extend down to a layer of dense clay. Unlike most outwash plains of the state, the entire depth above the clay layer is a fine sand.

The water system and the first wells were constructed in 1888, with the pumping station located about 400 feet north of the river. Since that time additional wells of different types have been driven in all directions from the pumping station at a maximum distance of about 400 feet. The wells are pumped by a direct suction of steam pumps located at the ground surface, which limits the draw down of the wells to a maximum of about 23 feet.

At about the same time the water works was constructed a coal gas plant was built to supply the city with gas for domestic use. The gas plant is located about 600 feet from the river bank in a southerly direction, up stream and across the river from the water works. The straight line distance from gas plant to water works station is 1800 feet. The gas plant produces a small volume of liquid waste containing many soluble organic substances which have a strong tarry odor or taste. Because of the porous nature of the soil it has not been necessary to remove these wastes through a pipe line as they readily soaked away into the sand about the plant.

In 1923 four new wells were constructed, one of them located near the river bank and yielding about 500 gallons per minute.

Although in 1919 some water consumers began complaining about disagreeable tastes in the water supply, these tastes were not decidedly objectionable until the summer of 1925. At that time an unusual drought was experienced and by the end of the summer months the city water supply had a strong tarry odor. Samples from different wells proved that the one located near the river was responsible for most of the taste, which was identical with the odor of the waste from the gas plant.

Inquiry disclosed the fact that in past years it has been necessary for house holders to abandon private wells located between the gas plant and the water works station because of tarry tastes, but it was assumed that the city wells would not be affected because of the distance between them and the gas plant, and because they were located across the river.—W. C. H.

USE OF CONTAINERS

It has been an encouraging sign of the past six months that more doctors have adopted the containers furnished by the laboratory. The reason for this is doubtless the greater satisfaction found in reports made on specimens so forwarded.

For example, when blood or feces specimens are sent in the proper containers and with laboratory blanks filled out, they pass quickly through the laboratory and are reported upon in the shortest possible time. On the other hand, when no information is given with the specimen, and the examination wished is only a matter of conjecture, the specimen is held up a day waiting for information by letter. If it is not received at the end of that time, the files are studied to see what examination that particular doctor usually wishes on such a specimen. When this cannot be determined, the speci-

men is given several different examinations in order that the doctor may receive the one desired. This additional work may delay the report 24 to 48 hours.

It, therefore, follows that more doctors are getting better laboratory service, as more take advantage of the convenience of using laboratory containers.—C. T.

PREVALENCE OF DISEASE

	May Report			
	Cases Reported			
	April 1926	May 1926	May 1925	Average 5 years
Pneumonia	1,204	590	528	600
Tuberculosis	493	628	524	647
Typhoid Fever	18	23	33	60
Diphtheria	304	349	239	459
Whooping Cough ..	811	645	759	649
Scarlet Fever	1,396	1,288	1,321	973
Measles	6,526	6,444	2,331	3,264
Smallpox	28	45	86	328
Meningitis	11	11	11	15
Poliomyelitis	2	4	6	3
Syphilis	1,352	1,212	1,180	786
Gonorrhea	853	729	884	723
Chaneroid	12	4	8	2

CONDENSED MONTHLY REPORT

Lansing Laboratory, Michigan Department of Health

	May, 1926			Total
	+	-	+ -	
Throat Swabs for Diph-				
theria				991
Diagnosis	30	427		
Release	91	185		
Carrier	1	255		
Virulence Tests	1	1		
Throat Swabs for Hemo-				
lytic Streptocci				589
Diagnosis	204	129		
Carrier	57	199		
Throat Swabs for Vincent's	22	434		456
Syphilis				6479
Wassermann	9	21	1	
Kahn	1171	5184	92	
Darkfield	1			
Examination for Gonococci	168	1668		1836
B. Tuberculosis				643
Sputum	126	485		
Animal Inoculations	6	26		
Typhoid				151
Feces	11	60		
Blood Cultures		12		
Urine		6		
Widals	21	40	1	
Dysentery				48
Intestinal Parasites				26
Transudates and Exudates				162
Blood Examinations (not				
classified)				615
Urine Examinations (not				
classified)				401
Water and Sewage Examina-				
tions				669
Milk Examinations				77
Toxicological Examinations				1
Autogenous Vaccines				3
Supplementary Examina-				
tions				403
Unclassified Examinations..				1827
Total for the month				15377
Cumulative Total (fiscal				
year)				192681
Decrease over this month				
last year				4218
Outfits Mailed Out				13795
Media Manufactured, c.c.				547070
Diphtheria Antitoxin Dis-				
tributed, units				21219000
Toxin Antitoxin Distrib-				
uted, c.c.				20250
Typhoid Vaccine Distrib-				
uted, c.c.				1433
Silver Nitrate Ampules Dis-				
tributed				4100
Examinations Made by				
Houghton Laboratory				2988

The Journal

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

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JULY, 1926

Report Malpractice Threats Immediately to Doctor F. B. Tibbals, 1212 Kresge Building, Detroit, Michigan.

Editorials

MINUTES OF THE REGULAR MONTHLY MEETING OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

The regular monthly meeting of the Executive Committee of the Council of the Michigan State Medical Society was held in Grand Rapids on May 27th and the following were present:

Chairman Jackson, R. C. Stone, George L. LeFevre, B. R. Corbus, F. C. Warnshuis, and Harvey George Smith.

1. The monthly trial balance of the books of the Society was submitted and approved.

2. The Secretary presented a communication from Dr. Bruce in answer to a letter of the Secretary, expressing willingness of the University to put on a three-day Post-Graduate Conference at the University Hospital. The preliminary plans of this Conference, as outlined by the Secretary, were approved and the Secretary instructed to continue with the arrangements.

3. The Secretary and the Executive Secretary were authorized to make the best possible

arrangements for a Post-Graduate Conference in the Upper Peninsula.

4. The Executive Committee then devoted itself to a discussion of the plans for the Annual Meeting in Lansing on September 14, 15 and 16. President Darling outlined his wishes and desires regarding that Annual Meeting. The Secretary presented an outline of the arrangements perfected through his office and by the Ingham County Medical Society.

In order to facilitate the program of that meeting it was decided that the House of Delegates would meet at 10:30 a. m., at 2 p. m. and 7 p. m. on the first day and to complete its business with the evening session of that day in order that the two subsequent days might be unhampered by meetings of the House of Delegates.

President Darling outlined his plans for the first general meeting and the Secretary was instructed to extend invitation to the individual nominated by President Darling.

Upon motion the Secretary was requested to request the Chairman of the several sections to nominate speakers for the General Scientific meetings.

The meeting adjourned at 9:30 p. m.

IODIZED SALT

Recently an article in The Journal of the A. M. A. by Hartsock, condemned iodized salt. Inasmuch as iodized salt was inspired by our State Society through our Pediatric Section this charge aroused our interest. We were concerned lest the good results attained might be jeopardized. The following letter confirms former conclusions and is imparted for the information of our members:

June 7, 1926.

Secretary-Editor, Michigan State Medical Society,

I at last have an opportunity to comment regarding your letter in reference to the Hartsock article on iodized salt.

We addressed a letter to all physicians in the state asking if any iodized salt had come to their attention. To the present time we have been unable to locate a single authentic case but several cases that have been benefited have been quoted to us.

We have re-surveyed Wexford County, one of the four counties originally surveyed to determine the prevalence of goitre, and found a 25 per cent reduction.

You will be interested in the comment I received from Dr. O. P. Kimball on the Hartsock article: "You will prevent goitre with iodized salt. Don't expect any bad results. Recent articles in Journal A. M. A. not to be relied on."

Of course there is no law in Michigan compelling the sale of the salt. The salt manufacturers merely agreed to place it on sale through the grocery stores.

Very truly yours,

R. M. Olin, M. D.,
Commissioner.

FURTHER FALLACIES OF THE SHEPPARD-TOWNER PROPAGANDA

WILLIAM C. WOODWARD

Executive Secretary, Bureau of Legal Medicine and Legislation of the American Medical Association, Chicago.

1. In support of pending legislation to authorize appropriations to carry the Sheppard-Towner Act into effect for two years beyond the date originally set for it to expire, it is urged that this is merely a temporary experiment, designed to prevent the loss of the money and effort already expended under the Act. The record shows, however, that is not the case. The extension of the Sheppard-Towner Act now sought, for two years only, is merely one of a series of extensions that will be sought if this extension be granted. In fact, proponents of the Sheppard-Towner plan regard the Act as permanent legislation.

In the report of the hearing before the Committee on Interstate and Foreign Commerce, House of Representatives, January 14, 1926, on H. R. 7555, the bill authorizing further appropriations for carrying the Sheppard-Towner Act into effect, on page 51, we find the following statement by Miss Grace Abbott, Chief of the Children's Bureau:

"The committee is familiar with the fact that the legislation enacted in the maternity and infancy act is permanent; the only thing that is not permanent is the authorized appropriation for the five-year period."

In the Congressional Record, April 5, 1926, page 6725, the same view was stated by Representative Barkley, when he spoke in support of the bill:

"My only regret is that this authorization is limited to two years. I would advise gentlemen of the fact that this is permanent legislation. The Sheppard-Towner bill is a permanent law. It only provided originally for a five-year authorization of appropriations. This merely extends the authorization two years, but the law itself is permanent law. . . ."

The same view was adopted by Senator Sheppard, in the Congressional Record, April 14, 1926, page 7254:

"As to the present status of the measure, let me add that, after consultation with the Budget Bureau and the President, the Secretary of Labor transmitted to Congress a recommendation for the continuation of the appropriations under the maternity act for two additional years. The act itself is permanent legislation."

It could not well be made clearer that the proponents of this legislation expect to keep the Sheppard-Towner plan as a permanent part of our Federal organization. But whether they do or do not plan to go that far, it is clear that they have no intention whatsoever of abandoning the scheme at the end of the two-year extension they now seek. For turning to the printed report of the hearing before the Com-

mittee on Interstate and Foreign Commerce, House of Representatives, we find the following:

"Mr. Newton: Now this further question. Do you consider that the two years is sufficient?"

"Miss Abbott: Well, I do not consider it sufficient if it is to end at the two-year period. I did not think in asking that period of time that was the intention either of the Secretary of (or) the President that there was to be no further extension after the two-year period." Page 12.

"Mr. Lea: What time would you specify for a certainty that, in your judgment, the United States should remain in this work?"

"Miss Abbott: Well, I do not want to specify for a certainty."

"Mr. Lea: Do you think four years?"

"Miss Abbott: No; I would rather say five as the time that the Government would without question need to continue the work."

"Mr. Lea: You are certain that the Government should stay in for five years?"

"Miss Abbott: Personally, I am; yes. But I am supporting the recommendation of the Secretary and the President for the two-year period, with a view to showing accomplishments and needs still existing at the end of that time." Page 14.

"Mr. Rayburn: You would not hazard an opinion on just when you think you could recommend that the Government go out of this supervision?"

"Miss Abbott: No; because I think it is a factual thing. I am not a prophet, after all, as to when that condition may come to pass." Page 15.

With such testimony as that of Miss Abbott, the statement that has been made in support of the pending bill, that "there is no disposition to extend Federal co-operation beyond the next one or two years," is certainly without foundation.

2. Attempts to justify an extension of the life of the Sheppard-Towner Act by showing the extent of activities in the field of maternal and infant hygiene since that act was passed are inadequate unless they show the results of such activities, and this they do not do.

"Child-health conferences," "school conferences," "infant clinics," "institutes," "public talks," "patterns distributed," "milk letters, with instructions to mothers," and similar activities (Congressional Record, April 14, 1926, pages 7254-7272) are at best merely agencies to conserve health and life. Evidence showing only that such activities are going on does not prove that they are accomplishing that result. Such evidence is even further from proving that such activities are being conducted efficiently and economically, or that they are being conducted under the Sheppard-Towner Act better than they could have been conducted by the states alone. The evidence offered is inadequate, too, to permit intelligent judgment as to the relation of such activities to the Sheppard-Towner Act, for such evidence very generally fails to show the nature and extent of similar activities in the same jurisdictions before the act was passed.

3. The assertions that have been made that

have been substantial reductions in infant and maternal mortality, with the implication that such reductions have been due to the Sheppard-Towner Act, are not supported by the evidence.

In the Congressional Record, April 5, 1926, on page 6720, in the argument of Representative Newton in support of the Act, the following appears:

"Since the operation of this act there has been a substantial decrease in both infant mortality and the maternity death rates."

Representative Newton then submits tables showing that in the three Sheppard-Towner years, 1922-1924, inclusive, the infant mortality rate for the registration area fell from 76 to 72, and the maternal mortality rate fell from 6.8 to 6.6. Such a decline could hardly be regarded as "substantial." But even if it were, it could not be accepted as an argument in favor of the Sheppard-Towner Act; for during the three years immediately preceding, namely, 1919-1921, inclusive, the infant mortality rate fell from 101 to 76, and the maternity rate fell from 9.2 to 6.8. Of course, we know the improvement shown by the figures last stated was only relative and that the decline was great because of the high mortality due to influenza in the year preceding the triennium named and from which the decline is computed. But what the improvement in 1922-1924 was due to, and how long it will continue, we do not know.

As a fallacious argument offered in support of the Sheppard-Towner bill recently passed by the House, we find the following by Representative Barkley, in the Congressional Record, April 5, 1926, page 6725:

"Taking the United States as a whole, in 1920, which was the year before the enactment of this law, the number of children who died in infancy amounted to 86 out of every 1,000 in the United States. In 1924, four years after the passage of this law, the death rate among children in the United States had been reduced from 86 to 71 per 1,000. This is a reduction of nearly 20 per cent in less than four years."

The Sheppard-Towner Act was not approved until November 23, 1921. Obviously, its enactment could not have influenced the infant mortality rate for 1921. Why, then, did not Representative Barkley take the infant mortality rate for 1921 as a basis for comparison, instead of the infant mortality rate for 1920? The infant mortality rate for 1921 was 76. The decline, therefore, under the Sheppard-Towner regime was from 76 to 72. It was only 1 per cent in three years, not 20 per cent in less than four years as stated. And no evidence is offered to show that the Sheppard-Towner Act had anything to do with even such decline as did occur.

4. Statements made to show the extent to which infant maternal mortality are preventable, in support of an argument for the enactment of the pending legislation, are without adequate foundation.

In the Congressional Record, March 31, 1926, page 6434, Senator Sheppard is quoted as referring to certain studies and investigations made by the Children's Bureau as follows.

"It was found that nearly 20,000 mothers and almost 20,000 infants under 1 year of age were dying in the United States every year from lack of proper knowledge as to the hygiene of maternity and infancy."

As a matter of fact, according to the Twenty-fourth Annual Report of the Bureau of the Census, covering Mortality Statistics, 1923, published in 1926, page 126, there were in the entire registration area of the United States in 1923, only 166,274 deaths of children less than one year old, from all causes. The estimated population of the registration area was 96,986,371, and the estimated population of the entire continental United States was only 110,663,502. (See Report cited, page 8.) And yet, unless Senator Sheppard has misinformed us, investigations by the Children's Bureau disclosed the fact that almost 200,000 infants under one year of age die in the United States every year from lack of proper knowledge as to the hygiene of maternity and infancy. If the reported findings of the Children's Bureau are correct, where do the extra 34,000 babies come from each year, who die from lack of proper knowledge? And where do all the babies come from who die every year from other causes?

A similar discrepancy exists with respect to maternal mortality. In support of the Sheppard-Towner Act, the Children's Bureau is quoted as authority for the statement that "nearly 20,000 mothers . . . were dying in the United States every year from lack of proper knowledge as to the hygiene of maternity and infancy." And yet the Report of the Census Bureau, cited above, page 176, shows that the total number of deaths in 1923 in the entire registration area, containing nearly nine-tenths of the population of the continental United States, from accidents of pregnancy and labor, and hemorrhage, blood poisoning and other conditions incident to the puerperal state, was only 15,505.

5. Comparisons between maternal mortality in the United States and maternal mortality in other countries, to the discredit of the United States, are not justified by comparable records.

Referring to studies and investigations made by the Children's Bureau, Senator Sheppard, according to the Congressional Record, March 31, 1926, page 6434, said:

"Reports from the birth-registration area of the United States showed that from 1915 to 1920 the death rate of mothers from causes relating to maternity was increasing. It was shown that the death rate of mothers in the United States from these causes was the highest for any nation in the world for which recent figures could be obtained, and that seven foreign countries had infant death rates lower than the United States."

The reason for the increase in maternal mor-

tality in 1920 as compared with maternal mortality in 1915 is not hard to find. In 1920 many expectant mothers died from influenza, and their deaths were charged to pregnancy; in 1915, influenza did not contribute to such mortality.

But probably the most overworked figures that have been used in the support of the Sheppard-Towner propaganda are such as those referred to above, purporting to show an exceedingly high maternal mortality rate in the United States as compared with the maternal mortality rates in other countries. Concerning comparisons of that kind, the Bureau of the Census has this to say:

"As already pointed out, the classification of deaths from puerperal causes differs greatly in different countries. Higher rates in one country than in another, therefore, do not necessarily mean higher mortality from these causes. However, as classification in a given country presumably differs but little from year to year, the rates do presumably serve as useful measures of mortality from these causes within the country itself.

"Comparing the rates of 1923 with those of 1915, for puerperal septicemia, the United States shows the same rate for both years, England and Wales a reduction of 13.3 per cent in its rate, Australia an increase of 30.8 per cent, New Zealand an increase of 137.5 per cent, and Scotland the same rate for both years. For other puerperal causes, the United States shows an increase of 5.4 per cent; England and Wales a decrease of 7.4 per cent; Australia an increase of 17.2 per cent; New Zealand a decrease of 15.4 per cent; and Scotland an increase of 7.1 per cent." Twenty-fourth Annual Report, Bureau of the Census, Mortality Statistics, 1923, published in 1926, page 64.

Just what comfort Sheppard-Towner propagandists can get out of these figures is hard to see.

6. Even if it could be admitted that infant and maternal mortality rates were as bad as the proponents of the pending legislation assert, and that it is as easily reducible as some of them claim, there is no evidence to show that preventive measures can be applied more effectively by the federal government than by the state.

So far as is known, not a single advance in methods for preventing infant and maternal mortality has been made by the Children's Bureau since the Sheppard-Towner Act was passed. It has merely adopted methods devised and in use by the several states and cities of the country. Obviously, supervision and control of such activities over the entire land area of the United States, approximately 3,000,000 square miles, by a federal bureau in Washington, must entail a heavy overhead expense—or must be supervision and control on paper only.

June 8, 1926.

Grand Rapids, Mich.

Secretary-Editor, Michigan State Medical Society,

Bills are pending in Congress to extend the life of the Sheppard-Towner Act, which our House of Del-

egates in 1922, condemned as a type of undesirable legislation that should be discouraged. To make the action of the House of Delegates effective, the co-operation of State Associations and County Societies and of individual members is needed. Your assistance is therefore earnestly requested.

The accompanying pamphlet, "Further Fallacies in Sheppard-Towner Propaganda," supplements the article in our May Bulletin, "The Sheppard-Towner Act: Its Proposed Extension and Proposed Repeal." Copies of both articles will be sent to you on request. Or if you prefer, send me the names and addresses of persons to whom you wish copies sent, and they will be mailed from this office with letters saying that you have asked that it be done. Prompt action is needed.

Can you not submit this matter, or the gist of it, to the readers of your Journal in your next issue?

A copy of this letter is being sent to the President of your Association.

Yours truly,

Wm. C. Woodward,

Executive Secretary,

Bureau of Legal Medicine and Legislation.

BIRTH CONTROL

From time to time we have received letters relative to the subject of birth control and the movement existant for its promulgation. Some of these correspondents have berated us for failure to aid. Others have asked us to attack President Little's position and actively. Again we have been criticized because we didn't oppose those who were attacking proponents. It must be at once clear that we are damned if we do and thrice damned if we don't. The Journal has no desire of entering into a controversy that presents two elements—science and religion. If we were to assume any position it would be on the side of the scientific and the social economic view. That is our position for The Journal is the organ of a scientific body and holds itself strictly aloof from theology, dogmas and creeds as laid down and instituted by church, priest or minister.

We exceedingly regret that the church and religion has injected itself into a scientific problem. That it assumes an attitude and position that ignores scientific premises and actual social conditions. That the church pushes as'de all facts that conflict with their religious tenets. We regret that the churches edict cause men of scientific training and knowledge to ignore science and accept the dictum and dogma of the church. That happens so often—men of high mental training, holding responsible educational positions become narrowed and delusioned and do untold harm because they decline to reconcile their theories to actualities—and the fight is on.

Things change, times change, conditions change and individuals and groups likewise must change and adapt themselves to present conditions. We can't do things in the same way forever. Traditions, superstitions and habits of the past, the distant past, cannot dominate the

present if we are to progress. Hence we must cultivate the open, receptive mind and permit actualities to guide us in reaching conclusions.

Reasoning from these actualities, reviewing existing social conditions, surveying the economics of present day living conditions and then revolving these actual facts it becomes quite evident that methods for instituting birth control must be instituted despite the theologians argument to the contrary. Science, and social conditions that exist, causes that conclusion to be reached if we approach the subject without the bias of religious views. We stand for a sane, temperate review of the subject and hope that birth control may be imparted to the public for the good of all people, our institutions of church and state and for the relief of our deteriorating social and economic conditions.

A BRIEF HISTORY OF THE GRATIOT, AND THE GRATIOT-ISABELLA- CLARE COUNTY MEDICAL SOCIETY

By E. M. HIGHFIELD, Secretary.

The present writer is indebted to Dr. I. N. Brainerd for the description of the first organization of a Medical Society in Gratiot County of which he was Secretary until the reorganization in 1902. Unfortunately the first records have not been kept, so that these first paragraphs are from the doctor's memory and obviously are not complete.

The Gratiot County Medical Society was organized in 1887. The charter members were Stiles Kennedy, W. D. Scott, A. J. Ervey, C. L. Barber, W. M. Weller, J. P. Carpenter, Lydia Higgins, J. H. Hamilton, and I. N. Brainerd.

The most distinguished among these men were Dr. Stiles Kennedy of St. Louis, and Dr. W. D. Scott of Ithaca. These men have been so long dead that this eulogium will not seem invidious. They were among those most cheerfully to contribute to the success of the meetings, which were held once every month.

Our programs consisted of three papers each month, often made upon the symposium plan. These were most helpful. The first paper ever read before this Society was upon "Colles' Fracture." But as all records have been destroyed up to 1902, I can not name the writers and their papers.

It must not be supposed that the programs were always rendered in full. The members "flunked" then just as they do now; but this member looks back to those "good old days" with a great deal of pleasure.

Thirty-nine years after the fact is a long time; all but four of those original members are dead. It must not be supposed that the meetings always materialized; but the Society al-

ways maintained a visible organization, until the reorganization in 1902.

The second call to organize the doctors of Gratiot County was issued by Dr. Geo. E. Butler of Alma, to which the following responded October 23rd, 1902.

G. E. Butler, I. N. Brainerd, G. S. Browning, Alma; W. M. Weller, J. P. Carpenter, W. D. Scott, Ithaca; H. F. Kilborn, Perrinton; W. M. Drake, Breckenridge; B. C. Hall, Pompeii; F. J. Smith, Sickles; E. L. Street, Wheeler; W. B. Clark, Stiles Kennedy, St. Louis.

Dr. Bulson of Jackson, Dr. Connor of Detroit, and Dr. Dodge of Big Rapids, officers of the State Society, were present to assist in effecting the organization.

The following were duly elected officers:

George E. Butler, President; W. D. Scott, Vice President; W. M. Weller, Secretary and Treasurer.

The second meeting to complete the organization, and adopt a constitution and by-laws was held in Ithaca, November 6, 1902 in Dr. J. P. Carpenter's office. The third meeting was held in Brainerd Hospital in Alma, December 4, 1902.

At this meeting it was decided to meet every three months. The first paper was read at this meeting by Dr. George F. Butler entitled, "Neurasthenia."

We find the following 25 doctors given as charter members of this second organization:

I. W. Brainerd, George F. Butler, G. S. Browning, E. A. Bagley, Alma; Stiles Kennedy, W. B. Clark, A. R. Wheeler, G. W. Petty, D. H. Andrews, St. Louis; B. C. Hall, Pompeii; H. F. Kilborn, Perrinton; E. L. Streett, A. J. Ervey, Wheeler; J. P. Carpenter, W. D. Scott, W. M. Weller, I. N. Monfort, Willard Monfort, F. McCandless, Ithaca; F. J. Smith, Sickless; W. M. Drake, L. A. Howe, C. S. Watson, Breckenridge; Charles A. Crane, North Star; F. J. Graham, Sumner.

Out of these the following are still in practice in Gratiot County:

I. N. Brainerd, Alma; B. C. Hall, Pompeii; H. F. Kilborn, Ithaca; W. M. Weller, Ithaca; W. M. Drake, L. A. Howe, Breckenridge; F. J. Graham, Alma.

The following are known to have died:

G. F. Butler, A. R. Wheeler, A. J. Ervey, D. H. Andrews, E. A. Bagley, J. P. Carpenter, G. W. Petty, Stiles Kennedy, W. D. Scott, F. J. Smith.

The following moved from the County, the address of some not being known.

G. S. Browning, F. McCandless, W. B. Clark and C. S. Watson, Saginaw; I. N. and Willard Monfort, Detroit; C. A. Crane, Cornuna.

Meetings were held every three months, usually in Alma, but some were held in St. Louis

and Ithaca. In looking over the minutes of those first meetings one finds many of the same questions come up then as now. For illustration, we find a fee bill was discussed pro and con for several meetings before one was adopted. Then we find resolutions urging the Legislature to pass this bill or opposing that bill. In November, 1905, Dr. A. R. Wheeler made a motion that we ask the State Board of Health to make bacteriological examinations. This is interesting in view of the large amount of work the State Board of Health now does along laboratory lines.

For the year 1904 the following officers were elected:

President, I. N. Brainard; Vice President, I. N. Monfort; Secretary-Treasurer, G. S. Browning.

The officers for 1905 were:

President, I. N. Brainard; Vice President, W. M. Weller; Secretary-Treasurer, E. A. Bagley.

The officers for 1906 were:

President: A. R. Wheeler; Vice President, N. F. McClinton; Secretary-Treasurer, W. E. Barstow.

The officers for 1907 were:

President, E. A. Bagley; Vice President, Charles Watson; Secretary-Treasurer, N. F. McClinton.

For some reason Dr. McClinton did not act as Secretary-Treasurer and Dr. J. N. Day was appointed and acted as Secretary-Treasurer for 1907 and 1908.

At the Annual Meeting, November 22, 1906, we find the following resolution was passed:

"RESOLVED, That it would be mutually advantageous to unite our Society with that of Isabella-Clare Counties."

At the next meeting, February 28, 1907, a motion was made and carried that we invite the Isabella-Clare County Society to meet with us at Ithaca. This meeting was held at the Court house, June 13, at which the following doctors from Isabella-Clare were present:

Doctors Pullen, McRay, Gruber, Abbott and Spooner. Nothing further is found in the minutes relating to the two Societies joining at this time.

The officers for 1908 were:

President, C. S. Watson; Vice President, W. M. Weller; Secretary-Treasurer, J. N. Day.

At the February 20th meeting a motion was carried that the next meeting be held in St. Louis, and be devoted to honoring Dr. Stiles Kennedy. This meeting was called the Kennedy meeting and was held in the Presbyterian Church in St. Louis, May 22, 1908. Dr. I. N. Brainerd was the orator of the evening at which he described the life of Dr. Kennedy. Dr. W.

D. Scott on behalf of the Society presented Dr. Kennedy with a loving cup.

The services at the church were followed by a banquet at the Park House at which the following toasts were responded to:

"Dr. Kennedy, The Young Physician's Friend," Dr. W. M. Drake.

"The Growth of Fraternalism among Physicians," I. N. Brainerd.

"Dr. Kennedy as a Man and Citizen," James K. Wright.

"Physician and Patient," Mrs. Frances E. Burns.

One more meeting of this character was held to honor Dr. W. D. Scott of Ithaca, May 28, 1909, and then we do not find any record of meeting to honor any more doctors until the farewell to Dr. E. A. Bagley, September 12, 1919, which will be described later.

The officers for 1909 were:

President, J. N. Day; Vice President, Geo. W. Petty; Secretary-Treasurer, W. M. Drake.

The officers for 1910 were::

President, W. M. Weller; Vice President, N. F. McClinton; Secretary-Treasurer, F. McCandless.

Two meetings were held this year, February 17th and May 30th, and then the records don't show what happened, but no records of meetings are made until May 25, 1911, when Doctors Haughey, then Secretary of the State Society, and Seeley Councilor met with the following doctors: Bagley, Lamb, Gardner, Suydam, Brainard, Barstow and Petty, and reorganized the Gratiot County Society by electing C. B. Gardner, President, J. N. Day, Vice President, and W. E. Barstow, Secretary-Treasurer. From this time until the present the records appear in the present writer's own hand writing.

Three meetings were held in 1911, at the last meeting, December 8th the following were elected officers for 1912:

President, J. R. Shaffer; Vice President, F. J. Graham; Secretary-Treasurer, E. M. Highfield.

This election deserves more than passing notice, for all three officers were from the extreme western side of the county. Elm Hall, Summer and Riverdale, and all three towns are now without a doctor.

Dr. Shaffer, who joined the Society at this time for the first, so far as records show, practiced in Elm Hall about 35 years, moved to Detroit about 10 years ago, where he died this past winter. Dr. Shaffer was a character and was noted for his peculiarities.

The writer as a new physician in the county, learned to like him as a neighbor and friend and found him a good councilor, ethical and resourceful at all times. Another doctor who had practiced in the county about 35 years also

joined the Society at this time for the first, Dr. Charles McLachlin of Elwell. He came to Elwell when the county was new, and had a large practice; he was known far and wide as old Doctor Mac and was famous as a story teller and for his ability to jolly his patients through a serious illness.

Four meetings were held in 1912. At the last the following officers were elected for 1913: President, W. E. Barstow; Vice President, F. J. Graham; Secretary-Treasurer, E. M. Highfield.

Four meetings were held in 1913. At the last the following officers were elected for 1914: President, I. N. Monfort; Vice President, E. H. Foust; Secretary-Treasurer, E. M. Highfield.

At the regular quarterly meeting, May 19, 1914, at the Park House in St. Louis, State Secretary, F. C. Warnshuis being present, the plan of having monthly meetings was adopted. The first monthly meeting being held June 30, 1914, at the Brainard Hospital, Dr. C. D. Brooks of Detroit being our out of town speaker. Subject: "Diseases of the Thyroid."

At the second monthly meeting the plan of having one picnic a year was adopted, the first one being held at Crystal Lake, September 1, 1914.

For some reason the picnics were never well attended and after three or four years were dropped for want of interest.

At the sixth monthly meeting in the Wright House, December 15, 1914, which was also the annual meeting, a motion was made and carried that we have an annual banquet, to which we invite our wives. With one or two exceptions these have been held each year since. We think perhaps 1914 was our best year, judging by the Secretary's annual report, which showed we had 33 doctors in the county, of whom 30 were members of the Society, with an average attendance of 16.

At this meeting E. H. Foust was elected President, and C. B. Gardner, Vice President; and we will not mention the Secretary for by this time he seems to be a permanent fixture.

During 1915, we judge from the records, we were not able to keep up the monthly meetings for we find there was no meeting in June, July and September.

At the November 16th meeting a motion was made and carried that the Secretary invite the Isabella-Clare County members to join us at the annual meeting in December to talk over the advisability of joining together.

Pursuant to a joint notice this meeting was held in the Wright House, December 16, 1915, 18 members from Gratiot County and 5 members from Isabella-Clare Counties being present.

After some discussion motion was made and

carried that the two Societies join to form the Gratiot-Isabella-Clare County Medical Society, so that last January we were ten years old. Dr. I. N. Brainard was the first President and Dr. C. D. Pullen first Vice President. The first year as a combined Society we had 10 meetings, at one of which we had a banquet, and one picnic.

The resolution that we meet once a month was originally made at the Secretary's suggestion and has never been rescinded. In practice this has been hard to carry out, especially in the winter when the roads are so nearly impassable. In ten years we have had 78 meetings or an average of nearly eight meetings a year. The past ten years is too recent to need reporting in detail. The was period was a time of many changes. C. B. Gardner and A. A. McNabb of Alma; C. D. Pullen of Mt. Pleasant, and M. C. Hubbard of Vestaburg were in the service during the war. Each returned to their former office, Dr. Gardner bringing Dr. Chas. F. DuBois, who was also in the service. Shortly after Dr. Gardner moved to Lansing.

The records show we formerly had feeds much more frequent than recently, possibly this may account for another change where as we formerly were able to get our own members to contribute to a program, and we used to have 3 or 4 papers at a meeting, now it is very difficult to get our members to respond when requested to prepare papers, and it is also regrettable that the attendance is less to hear our members than to hear visitors.

Two more meetings need to be reported and then we can close this history.

Farewell to Dr. E. A. Bagley. On September 12, 1919, Dr. and Mrs. E. T. Lamb opened their beautiful home to the profession of Gratiot County for a farewell to Dr. E. R. Bagley. Twenty-four doctors were at the dinner, after which Dr. E. H. Foust acted as toastmaster, and the following responded: I. N. Brainard, I. N. Day, A. R. Wheeler, F. J. Graham and N. F. McClinton.

On behalf of Dr. Bagley's many friends in the profession Dr. W. E. Barstow with appropriate remarks, then presented the doctor with a gold watch, engraved, from the Gratiot County Medical Society. Dr. Bagley being nearly overcome with emotion, responded with appropriate remarks.

From the standpoint of fraternal feeling and good fellowship this was a fine meeting.

On February 3, 1921, Mrs. Brainard invited the friends of the doctor to help him celebrate his 40 years in the practice of medicine.

Strictly speaking, this was not a Society meeting, so the Secretary has no record of it, but we all know Mrs. Brainard's ability in the banquet line, sufficient to say this was one of

her best. After the banquet, Dr. S. E. Gardine acted as toastmaster. Toasts were responded to by the following, F. J. Graham and J. N. Day.

On behalf of the doctor's professional friends, Dr. R. B. Smith presented Dr. Brainerd with an engraved gold watch.

We have already mentioned that Dr. Brainerd was the first Secretary of the Society from 1887 until 1907, and no history of this Society is complete, without saying he was always active, could always discuss a paper, frequently read papers, or presented a clinical case. When we met in the afternoons his hospital was always open for our meetings.

It is to be regretted that advancing years, and our plan of evening meetings has made it so we rarely see the doctor at a meeting now.

KOCH "CANCER METHODS"

Last month we published the findings to date on the so-called Koch Cancer Cure. A sheet issued by this outfit attempts to make a come-back at the A.M.A. for revealing their methods. As usual the attempt is characteristic of all such replies and resorts to quackish arguments and retorts. Because there are some who are being misled we again draw attention to unfounded statements and untoward results. It is a shame, far beyond our power of expression, for individuals to secure money by preying on the unfortunate victims of cancer. The appended communications reveal anew these nefarious methods:

Michigan,
May 20, 1926.

Dear Doctor Darling:—

I am writing you a letter in regard to my daughter, who took the Koch cancer treatment. I want to explain to you as near as I can in a letter about what an awful time it was, and if my letter can ever be of any use for a testimony against Dr. Koch or will prevent any other poor person from falling victim to such a fate as ours was, I will be pleased.

Our little girl was only 18 years old. She died in March, 1926, and in November, 1924, she underwent an operation at the Grace Hospital in Detroit. She was only 16 years old then. Her operation consisted of the removal of a large tumor weighing 6 pounds. A laboratory test showed it to be a carcinoma. She got better for a few months and then it all came back again. She suffered awful.

We had her to ever so many doctors in Detroit, Port Huron, Ann Arbor and all our home town doctors had seen her and they all said the same thing and that it was a perfectly hopeless case. She was at the University Hospital at Ann Arbor and took X-ray treatments but she kept getting worse all the time and no one but God knows how she suffered. She had one tumor in the abdomen as large as a teakettle, so one doctor said, and one large one on her neck about like a cup. One doctor said that she was full of them in her stomach and all over and that there was not any thing that could be done for her. Of course we were about crazy to have to give her up. When she had grown up to the age where she was so much company to us, she would take to her bed for a week or two and then get up again for a few days at a time. She

kept losing weight all the time, was 6 feet tall and only weighed 85 pounds the last time that she was weighed. At the last she was in bed six weeks.

I wrote to Dr. Koch and explained to him just how she was and he answered and sent us a book stating what great cures had been made by taking his treatment and referred us to Dr. — at Port Huron. So we went to see Dr. — and told him just how bad she was and showed him letters of reports that we had from the Hospitals in Detroit and Ann Arbor. He wanted us to come home and put her on a diet for a week and then he would come and give her the treatment. But we did not want to do that without him seeing her first for we knew just how bad she was. So then he came up to Almont the very next day to see her and we had to pay him \$50.00 for coming and after seeing her, he said that if it was his daughter or his wife or himself, that he would give the treatment. So that made us feel much better.

He put her on a diet of apple juice and nothing else for a week and I never can explain to you or anyone else how she suffered for something to eat. It broke our hearts and we never, never can forget it. She says, "Mamma, if you don't give me something to eat, I will go crazy" and that she was going to die and that we would be sorry, for that we would know that she died hungry and we are so sorry that it all happened the way it did. It made the whole community of Almont sad to think that it was such a young life and she was a nice girl and then to have to suffer the way she did.

Dr. — came in one week after she was put on the diet and gave the treatment. We told him when he first came in the house that we thought that she was dying. She had all death symptoms and was so weak and tired that she could not hold her head up and would keep saying to us that she was so tired that she could not live. But he gave the treatment just the same and we gave him \$325.00.

I said, "Dr. —, if our little girl does not get well, we have lost her and our home too, for we had to put the second mortgage on our home to get this money for you."

He said that he could not come down any on the price so he took the money. We have always worked hard and have been honest people. We had our home and were happy before this bad luck came to us. We have the sympathy of the whole community around Almont.

Our little girl only lived two days after the treatment was given. We told Dr. — that she was dead and thought that he would give us back part of the money so that we could have something to pay the funeral expenses but he would not.

We do not know what way to turn. It took so much for her operation and she was sick over a year and then this last came and took all that we have and we can never be happy again. The hardest part of it all was to give up our little girl and if Dr. Koch's treatment for cancer is a fake, which all the doctors around here say that it is and they say that the world knows it is, I would like to know that no one else would be beat out of their hard-earned money like we were.

Doctors in Almont and Capac saw her while she was in bed and they say that they knew that she was a dying girl and that Dr. — must have known it too. If he did and would do such a cruel deed, I feel that there is one greater than us all that will judge him and I would sooner be in our place without a home than to be in his and know that I would have to answer for it all sooner or later.

It was Dr. — of A. who asked us to write to you. I would like to know if you receive this letter.

Mrs. Tom Lashaw.

June 2, 1926.

Secretary Editor, Michigan State Medical Society,
Powers Theatre Building,
Grand Rapids, Michigan.

I am afraid that Mrs. Lashaw stands a very poor chance of getting her \$375 back.

Can you not print her letter in the State Journal? To me it is one of the most compelling stories I have ever read and I believe its wide circulation will do more to put a crimp in the abominable business of the Koch outfit than all of the scientific material we can publish in a year.

Cordially yours,

Arthur J. Cramp.

June 6, 1926.

Dear Doctor:—

In reply to your letter of the 29th, I wish to relate the facts to you as I see them. On March 10th, 1926, Mr. Thomas Lashaw of Almont, Michigan, came into my office on behalf of his daughter who had been operated upon some time previous for cancerous growth of the right lower abdominal region, and who had also taken a number of serum treatments for this condition from a late member of our Society, two or three injections being given each week for some time.

Mr. Lashaw asked me about giving the serum treatment of the Dr. W. Koch. I informed him in the presence of his son that I was not well acquainted with the treatment, but told him what I had learned from people who had taken the serum, but that I would in no way be responsible as to the results. Also that I would not consider giving her the serum or the expense which would be incurred without seeing his daughter.

He requested that I come to his residence, which I did on March 11th, 1926, and examined the girl. I explained to the family the condition as I saw it and said I would take no responsibility as they had been trying all known means of getting their daughter cured, but if they wished to jump at the last straw by using this serum, I would obtain it and that the fee would be \$300.00 for the serum treatment only, exclusive of my fee for making the two trips of 44 miles each way for which I charged \$75.00.

On March 18th I received the serum and treated her on that date.

On the 17th of March Mrs. Lashaw called me by Long Distance Phone and said to come without fail as soon as the serum arrived.

I hardly see why they complain now as they understood all the conditions and results which might be expected before authorizing me to obtain the serum.

I was not aware that a mortgage had been placed on their home as they claim until some days after their daughter died.

I would like to state at this time that I am in no way connected with Dr. Koch or his organization, and that the results received through the treatment of a couple of patients has convinced me that this serum is of no value for the cure of cancer.

I wish this letter to be of a personal matter between you, Dr. Darling, and myself and is not for publication.

Hoping this will be satisfactory to you, I remain

Faternally,

—, M. D.

FEDERALIZED MEDICAL TREATMENT VERSUS THE PRIVATE PRACTITIONER

By the Veterans' Act of 1924, Congress authorized hospitalization of veterans at government expense, without regard to the nature of the disability. This treatment of disease at government expense was made available to all veterans in certain classes, without reference to the ability of the individual to provide treatment at his own expense or his right to obtain it from the state or city in which he lived. The Journal¹ called attention a few months ago to efforts at extension of the scope of this federal aid. May 17, the House of Representatives passed a bill² extending such government attentions to cover outpatient treatment as well as hospitalization, and enlarging the term "veterans" to include women who served as army nurses under contracts between April 21, 1898, and February 2, 1901, contract surgeons and contract dentists. This bill is now pending in the Senate.

The government cannot be niggardly in the reward it gives for military service, but treatment and hospitalization for disabilities not incurred in the line of duty cannot be regarded as a recompense for such service. As they have no logical relation to the military or quasimilitary status of the beneficiary and are not proportioned to the military service rendered, they can be regarded only as gratuities. How long before the same reasoning that has provided these nonmilitary bounties may be expected to provide similar arrangements for governmental civilian employees? And if later the families of beneficiaries already on the rolls are placed among the elect, the step will not have gone much farther.

State medicine in this obnoxious form is with us, and is tending to grow under the patronage of the federal government. Physicians and private hospitals even now must compete with the federal government for the practice of those whose disabilities have not originated in government service and who are abundantly able to pay for treatment. If the bill passed by the House of Representatives becomes a law, the private practitioner and the private hospital will have to compete with the government, not only in providing hospital treatment for veterans, but in providing both hospital and outpatient treatment for veterans, contract surgeons, contract dentists and contract nurses. How long such unfair competition will continue is uncertain. But unless the present movement is checked, the outcome is sure: a greater and greater encroachment on

1. The Trend of Veterans' Relief Legislation: State Medicine editorial, J. A. M. A. 86:278 (Jan. 23) 1926.
2. H. R. 12175. A Bill to Amend the World War Veterans' Act, 1924.

the rights of the individual patient and physician.

The House of Delegates has three times passed resolutions voicing its opposition to this type of state medicine. Resolutions, however, accomplish nothing unless backed up by action. That action must come from the rank and file of the physicians throughout the country, who must make known their views to their senators and representatives in Congress. Action must be prompt if the extension of free federal medical service is to be checked.

June 17, 1926.

Grand Rapids, Mich.

Michigan State Medical Society,

The Senate Committee on Finance, on June 9, reported H. R. 12175, An Act to Amend the World War Veterans' Act, 1924. The bill as submitted to the Committee contained amendments to the World War Veterans' Act, 1924, inserted by the House of Representatives, authorizing *outpatient* treatment (hospitalization is already authorized) at Government expense, regardless of the nature or origin of disability, to all veterans, and authorizing both outpatient treatment and hospitalization, regardless of the nature or origin of disability, for those women who served as army nurses under contracts between April 1, 1898 and February 2, 1901, and for contract surgeons and for contract dentists. The Senate Committee recommended that the amendment extending free outpatient treatment to veterans be stricken out and that the amendment authorizing hospitalization and outpatient treatment for contract surgeons and contract dentists be omitted. The Committee leaves in the bill the provision for extending hospitalization to the nurses named.

Although the recommendations of the Committee do not go as far as the American Medical Association asked, yet they do tend to arrest the extension of free medical treatment at Government expense, regardless of the nature or origin of disability. It seems opportune, therefore, to telegraph and write your senators and representatives again urging opposition to any extension whatsoever of such Government gratuities. Such letters and telegrams will help to hold the ground conceded by the Senate Committee on Finance in its report, even if it does not do more.

A copy of this letter is being sent to the President of your association.

Yours truly,

Wm. C. Woodward,
Executive Secretary,
Bureau of Legal Medicine and Legislation.

Editorial Comments

We desire attention to the Editorial on the Shepard-Towner propaganda. It is only by registering your protest to your Senators and Congressmen that this undesired legislation can be curtailed. Failure to act on your part will defeat the efforts of your representatives of the A. M. A. to do away with this type of legislation. Act now.

Currettement of the uterus is indicated solely for determination of malignant involvement of the fundus. It is taboo in the so-called inflammatory disturbances, cervicitis and menstrual disturbances. We have commented upon this procedure from time to time. Reports coming from hospitals indicate that curretage

is still an overdone and abused procedure evidencing that there are still those who employ it unnecessarily.

Christian Science, that is far from Christian as defined by theologians, continues to delude individuals. Its so-called "healers" or "practitioners" by their methods that are far apart from science and the scientific are causative factors in hastening death or condemning to permanent disability and suffering those whom they are able to induce to employ them. As the people become educated in health laws of right living, the factors that actually cause disease and how disease may be prevented, this "Christian Science" imposition will cease to exist as one of our great American fallacies. If these "healers" would but ascertain the common laws of physiology and physiologic function possibly some of them might desist. What interesting factors would be revealed could they but be psycho-analyzed.

"Come over and help us." That is the cry the Bible reports was made some two thousand years ago in Macedonia. We don't know what sort of help was wanted; that isn't the subject of this comment. We are, however, sending out the same call for help on behalf of our County Societies. There are some who need the help of their sister and neighboring counties. They are calling upon their stronger, larger sister Societies to help them in their work. We join in their call and urge that County Society officers extend themselves in supplying speakers and programs for their meetings. Push on in going to these Counties and putting over some real, practical meetings.

"SAY IT WITH BRAKES AND SAVE THE FLOWERS"

"Say it with brakes and save the flowers,"
A pretty good hunch for this world of ours,
Where every one whizzes and rushes by
With a sneerful snort and a raucous cry,
Where no one's supposed to be doing well
Unless he is riding for leather'n' hell—
Step on the gas, boys . . . into the grave,
Think of the flowers a feller could save!
"Say it with brakes and save the flowers"—
Good for the peoples, good for the powers;
Good for the man in the buzzing bus;
Good for the birds on the curb who cuss;
It's good for you and it's good for me,
One smack of a crack of a fine idee
For this speed-mad crazy old world of ours:
"Say it with brakes and save the flowers."

—J. P. McAvoy.

Your Council is planning a three-day Post-Graduate Clinic at the University Hospital during the latter part of October or the first of November. It will be three days filled with hourly demonstrations and presentations of Clinical cases for the general practitioner. There will be two evening sessions and a football game on Saturday afternoon. This course will be free to "members only" of our State Society who enroll for the course. Detailed announcements will be forthcoming in subsequent issues of The Journal.

There is an Association of State Medical Examining Boards. There is a reciprocity relationship between a goodly number of these boards whereby license to practice may be obtained by endorsement. There is a National Examining Board without jurisdiction and whose certificate has no legal value. The licensing of a physician to practice is held to be one of the police rights of states. It is so in a measure. However, the majority of State Boards are painfully

inactive in exercising police power when it comes to prosecuting illegal practitioners. The whole question of licensing, State Board powers and activity and enforcement of medical practice laws is of sufficient importance to demand studied consideration and the adoption of a present-day program of concerted effort. We suggest that the Federation initiate such a study and lay the foundation for a nation-wide plan of rules and procedure.

Manuals on Periodic Physical Examination are being distributed through our County Societies. Each member is entitled to a copy. Have you received yours? We are interested in learning whether these manuals have been of assistance to you and caused you to appreciate more fully what a periodic physical examination entails. Your conclusions are solicited.

The August Journal will contain the program for our Annual Meeting in Lansing, September 14, 15 and 16. We urge now that you attend this meeting, which is going to be radically different from any that have ever been held in the past.

With its May issue, the American Journal of Surgery imparts the announcement that it has been taken over by Paul B. Hoeber, Inc., Medical book publishers and a new broadened editorial policy developed. Dr. Wm. M. Brickner will continue as editor. Some twenty recognized surgeons have consented to serve on the editorial board, among whom we note Blake, Cushing, Coley, Jonas, Matas and Case. It is purposed to cause each issue to reflect the highest and best in American Surgery; to combine theory, research and practice and also to cover the field of industrial surgery and physical therapy. Its advertising pages will conform to the A. M. A. standard.

There is need for such a surgical journal. We welcome it and urge our readers to subscribe support in the form of subscriptions. Send your two dollars to American Journal of Surgery, 67 E. 59th St., New York for a year's subscription. You will receive a helpful journal.

One-fourth of the school children of Michigan have been protected from diphtheria since January, 1925, according to a report just issued by the Michigan Department of Health. Figures show that enough toxin-antitoxin has been sent out from the Department laboratory from January, 1925, to June, 1926, to immunize 188,979 persons. This is approximately one-fourth of the estimated population of the state between the ages of five and fifteen.

"Judging from the constantly increasing requests coming in to our offices for information and for toxin-antitoxin, this is just the beginning," says Dr. R. M. Olin, State Commissioner of Health, in commenting on the report. "As more parents realize that toxin-antitoxin actually prevents diphtheria, that it is furnished free by the state, and that its administration is a harmless procedure that their family doctor is ready to carry out, the percentage of protected children will increase."

The child of pre-school age is receiving the greatest emphasis in diphtheria protection campaigns throughout the state, reports to the State Department indicate. More than 80 per cent of the deaths occur in this age group.

No harmful effects of toxin-antitoxin have been reported in the nearly 200,000 persons treated. This is due, health authorities state, to the very mild toxin-antitoxin preparation now in use.

The A. M. A. supplies auto emblems for physicians who are members of County Societies. These emblems are of a new pattern and numbered. They are copyrighted and supplanted the old emblem because cultists were using them. Emblems may be secured by writing to the A. M. A. but before making application be sure your dues are paid. If you have an old style emblem on your car we recommend that you remove it ere you find a cultist driving up alongside of you with a pattern of the old emblem on his car.

New York has set 1930 as the goal for eradication of diphtheria. All agencies are joining in the movement and urging toxin-antitoxin.

During the month of June, every physician in the state should have received a directory information card. Every one is urged to fill out and return the stamped card regardless as to whether he or she has changed their residence or office address.

This information will be used in compiling the Tenth Edition of the American Medical Directory, now under revision in the Biological Department of the Association. The directory is one of the altruistic efforts of the Association and is published in the interest of the medical profession which means ultimately in the interest of the public. It is a book of dependable data concerning the physicians and hospitals in the United States and Canada.

It is a pleasing sign to note the increasing number of doctors who are becoming interested in golf. With this interest there is an increasing getting together for a foursome or a tournament. Good fellowship is engendered. Here and there we find a "star," but on the whole our averages are about the same—85 to 110. This leads us up to a suggestion for a state golf tournament for doctors. Some of you enthusiasts get busy and put it over. The Journal will supply one of the prize cups.

Cut out the bunk. The day of hocus is past. We just encountered a patient who in stating her past history imparted: "That once she had a congestive chill and that she called Dr. B—, who was operating, but left his patient in the middle of the operation and came to her and gave her a hypodermic. Dr. B— said if he hadn't come when he did she'd die. The doctor then went back to the hospital and completed his operation." Rot, sure we know it, yet doctors there are who hand patients this bunk. The Publication Committee is considering publishing right names of doctors who hand out such bunk to people.

When candidates for state offices line up with cultists and seek their votes with promises of legislative recognition it's time to assert ourselves. To that end we urge that you canvass your community and help select men who when elected serve on merit and not on campaign pledges.

Remember the dates—September 14, 15, 16—of our annual meeting in Lansing. A splendid program is rounding into shape. Make your hotel reservations now.

Twice during the past week requests have come in for a list of County Secretaries. For twenty years a roster of County Officers has been published in each issue of The Journal. We wonder how well our members read The Journal?

Among Our Letters

NOTE.—This department is the open forum of our members. Your communications and discussions are welcomed. Anonymous communications cannot be accepted, though at times names may be omitted by the Editor. Personalities will not be printed and responsibility for opinions is not assumed. We invite your interest in this department. Address: The Editor, Journal, Michigan State Medical Society, Powers Theatre Bldg., Grand Rapids, Mich.

Editor of The Journal:

Kindly publish the following advance notice of our meeting in the next issue of your Journal. Thank you.

"Anesthetists Meet."

"The annual meeting of the Mid-Western Association of Anesthetists will be held in Kansas City, Mo., October 11-14, 1926 at the same time as the Clinic Week there. Headquarters, Baltimore Hotel.

"An interesting and attractive program is in the process of making. Any physician or dentist desiring to read a paper should send the title of his paper to the Secretary very soon.

"Ralph M. Waters, M. D., Secretary-Treasurer, 425 Argyle Bldg., Kansas City, Mo.

"Fraternally yours,

"Frances E. Haines."

Editor of The Journal:

Inasmuch as the Wayne County Medical Society is on summer vacation during July and August, there will be very little, if any, news to report. I shall, however, make an effort to pick up whatever may be of interest and send it along to you.

Permit me, at this time, to compliment you on the excellence of the Journal which you are turning out and to extend to you my best wishes for your continued success as its Editor.

Fraternally,
W. S. Reveno.

Editor of The Journal:

Enclosed we are sending you a copy of the amendment to our Medical Practice Act which the legislature enacted this year. You probably are aware of the fact that we have struggled for more than a dozen years to secure this amendment. Primarily it provides a method for enforcing existing statute. This is to be accomplished through the following procedures:

Annual registration of all physicians by the Board of Regents; limitation of the practice of medicine and the use of the title "doctor" to those licensed by the Board of Medical Examiners; prosecution of all violators of the law by the Board of Medical Examiners with the assistance of the attorney general instead of the county district attorney, except in two or three of the largest counties; prosecution to be brought in courts of special session where such exist, and the Board of Medical examiners to employ inspectors to investigate charges of violation of the law and collect evidence for the attorney general.

Provision for the formation of a Committee on Grievances is new, we believe, so far as medical societies are concerned. The idea was suggested by the admirable success of a similar institution in the Bar Association.

Thanking you for the co-operation we have had in the past from your State Medical Society and trust-

ing that if we can be of any assistance in the future you will call upon us, I am

Very truly yours,

Henry L. K. Shaw,
Chairman Committee on Legislation.

Editor of The Journal:

It may interest you and other members of the Michigan State Medical Society to know that Representative Clarence J. McLeod of the Thirteenth District of your State introduced H. R. 9055, a bill to regulate the practice of chiropractic; to create a board of chiropractic examiners in the District of Columbia, and to punish persons violating the provisions thereof. This bill has just passed the House of Representatives, and an effort is being made to defeat it in the Senate. Representative McLeod not only introduced this bill, but was a member of the Committee on the District of Columbia that reported it favorably.

You need not trouble yourself to reply to or even acknowledge this letter.

Yours truly,

Wm. C. Woodward, Executive Secretary,
Bureau of Legal Medicine and Legislation.

Editor of The Journal:

I want to express to the State Medical Society my appreciation of the fact, first, that they undertook my defense in the suit brought against me by Dr. Mercer, and secondly, for the able manner in which the case was handled.

The splendid support of the local Calhoun County Society, and the State Society, was most gratifying and helped me through the trial of the only litigation ever brought against me.

Sincerely yours,

Dr. E. Van Camp.

State News Notes

The Detroit Dermatological Society held its annual clinical meeting on Tuesday, May 25, 1926, at Harper Hospital.

At the regular meeting on May 11, Dr. F. M. Meader was elected Chairman, and Dr. R. L. Novy Secretary of the Medical Section.

The officers elected for the ensuing year are; President, L. T. Henderson; Vice President, C. J. Marinus; Secretary, D. L. Van Duzen; Treasurer, J. R. Bolasny.

Dr. F. M. Meader, Medical Director of the Detroit Board of Health, read a most interesting paper on "Sunlight as a Disinfectant" at the meeting of May 11th.

On May 18, Dr. M. A. Mortensen of the Battle Creek Sanitarium spoke on "Cardiovascular Problems" before a large group of members of Wayne County.

The Commencement Exercises of the Detroit College of Medicine and Surgery were held at the College of the City of Detroit at 8:30 o'clock on the evening of Thursday, June 17th, 1926.

The West Side Physicians' Association met at the Memorial Hospital May 27. The meeting was addressed by Dr. R. E. Loucks on the subject of "Gynecological Indications for Radium Therapy."

The East Side Physicians' Association held its last meeting of the year at the Jefferson Clinic, May

20th. Dr. Robb read a very interesting paper on "Acute Ear and Its Complications."

The last meeting of the year was held May 25th. Dr. David N. Eisendrath, of Chicago, delivered a most illuminating talk on "The Significance of Blood in the Urine," and Dr. C. F. McClintic, of this city, spoke on "Clinical Neurology of the Urinary Bladder."

The United States Veterans' Bureau Medical Society of Michigan was addressed by Fred H. Cole, M. D., on the subject of "Infections of the Kidney" on May 27th, at the Wayne County Medical Society building.

Doctors F. D. Robertson and R. W. Webb, of Grand Rapids, sponsored a golf match for local doctors the first Thursday in June. Some 38 local aspirants contended for the 12 prizes offered. Possibly one or two local foresomes might accept challenges from other "Hagenites" or "Jones" if handicaps are adjusted.

The two nominees for President, Doctors J. H. Dempster and R. E. Loucks each received the same number of votes, so that the choice of the new president was left to the Council of the Society. Dr. J. H. Dempster was elected President for the coming year. Other officers are: Vice President, M. A. Darling; Secretary, Richard M. McKean.

At the last meeting of the Detroit Oto-Laryngologica Society the following officers were elected for the coming year.

President, Frank L. Ryerson, M. D.; Vice President, Emil Amberg, M. D.; F. A. C. S.; Secretary-Treasurer, Wm. Fowler, M. D.

The Scientific Session was given over to the study of the nerve pathways to and from the organs we are most interested in, with F. C. McClintic, M. D., as instructor. Dr. McClintic illustrated his talk with prepared specimens and lantern slides, showing especially the anatomical connections necessary to give the physiological results.

To encourage investigations of alimentary tract function, Dr. Frank Smithies, Chicago, has presented to the School of Medicine of the University of Illinois, bonds in amount sufficient to yield annually, in perpetuity, not less than \$100.00. This fund is known as "The William Beaumont Memorial Fund" and the income therefrom, as "The Annual Beaumont Memorial Award."

The award is to be made each year to the research or clinical investigator, who, in the judgment of a Faculty Committee, has contributed the most important work during the year, in the field designated.

The first award will be made in 1927. Manuscripts covering investigations do not have to be entered specifically for the award nor is it required that they be submitted to the Faculty Committee. The award is to be granted by the Committee after it has considered carefully all investigations published during any year in periodicals throughout the United States. Thus, the award is available to workers in any institution, and is not confined to members of either Faculty or Student body of the University of Illinois.

About 30 members of the Michigan Trudeau Society were the guests of the Ontario Laennec Society at the Queen Alexandra Sanatorium, London, Ontario, on May 25, 1926. The Laennec men proved themselves to be genial and generous entertainers. After inspection of this splendid sanatorium and its clinical work the afternoon program was furnished by several of the most eminent specialists of Ontario. Of special interest was the brilliant pathological and X-ray research that is being carried on at this hospital by Dr. Andrews. The evening program was furnished by the Michigan Trudeau Society. Dr. W. H. Marshall, of Flint, presided. Papers were contributed by Doctors H. Rich, of Detroit, J. Bruce Whyte, of Battle Creek, and J. B. Amberson, of Detroit. This meeting was so successful from both the social and scientific standpoint, that the Laennec Society has been invited to a Trudeau meeting to be held in Detroit next year. At the annual business meeting of the Trudeau Society the following officers were elected:

President, Dr. W. Vis, Grand Rapids; Vice President, Dr. E. R. Van der Slice, Lansing; Secretary-Treasurer, Dr. B. Douglas, Northville.

OUR SOCIETY BUSINESS AND ACTIVITIES

HARVEY GEORGE SMITH

EXECUTIVE SECRETARY

NOTE: This Department will each month contain a discussion and report of our Society work and planned activities. Your interest and correspondence as to your problems is solicited.

POST-GRADUATE CONFERENCES

One hundred and eighty-two doctors answered present at the three Post-Graduate Conferences conducted by the Michigan State Medical Society in May and June.

The Conference at Jackson on May 25th numbered an attendance of eighty, at Fremont on June 2nd, seventy-five, and at Cheboygan, June 9th, twenty-eight.

At each meeting distance travel records were broken, new enthusiasms and satisfactions were expressed for the State Society in making the Programs of the Conferences

of material value to the membership. At the Cheboygan Conference 75 per cent of the doctors attending traveled at least one hundred and fifty miles, representing Alpena, Sault Ste. Marie, Newberry and Gaylord. These results are hoped for in every program that is conducted. It would be a disappointment to the Council, the Executive Committee and Officers of the State Society were they not attained.

The speakers who take part on the programs of the Post Graduate Conferences are the bases for their success. They give

unstintingly of time, not less than one day and often two. They serve their fellows by giving the best they have in practical advances in scientific knowledge. They present two half-hour lectures and spend most of their free time before, between and after lectures in personal conferences. To them is due the credit for the expressions of enthusiasm and satisfaction offered by the attending doctors. The following programs were presented:

POST-GRADUATE CONFERENCE

City Club, Jackson, Mich.

Tuesday, May 25, 1926.

- 10:00—Opening Statements.
B. F. Greene, M. D., Councilor-Chairman.
- 10:15—"Arthritis."
John B. Youmans, M. D., Ann Arbor.
- 10:45—"Diseases of the Liver."
Plinn F. Morse, M. D., Ann Arbor.
- 11:45—"The First Pre-Natal Interview and Examination—Discussion and Moving Pictures."
Alex. M. Campbell, M. D., Grand Rapids.
- 12:00—Lunch—City Club.
- 1:30—"The Acute Abdomen."
Speaker—Senator Copeland.
C. G. Darling, M. D., Ann Arbor.
- 2:00—"The Gastro Intestinal Gradient."
D. M. Cowee, M. D., Ann Arbor.
- 2:40—"Peptic Ulcer and Medical Management."
John B. Youmans, M. D., Ann Arbor.
- 3:10—"Blood Vessels and Blood-Vessel Accidents."
Plinn F. Morse, M. D., Ann Arbor.
- 3:40—Recess.
- 3:50—"Cesarean Section from the View-Point of the General Practitioner" (Illustrated).
Alex. M. Campbell, M. D., Grand Rapids.
- 4:20—"Streptococci Infections."
C. G. Darling, M. D., Ann Arbor.
- Adjournment.

POST-GRADUATE CONFERENCE

Congregational Church, Fremont, Mich.

Wednesday, June 2, 1926.

George L. LeFevre, M. D. Councilor-Chairman.

- 10:00—"Physical Examinations of the Apparently Well—Demonstration."
Burton R. Corbus, M. D., Grand Rapids.
- 11:00—"Pre-Natal Care."
R. S. Cron, M. D., Milwaukee.
- 11:30—"Myocarditis."
William J. Eagan, M. D., Milwaukee.
- 12:15—Lunch—Informal talks.
- 2:00—"Neurological Manifestations in Pernicious Anemia."
John L. Garvey, M. D., Ann Arbor.
- 2:30—"The Acute Abdomen."
Frederick C. Warnshuis, M. D., Grand Rapids.
- 3:00—"Gastric Ulcer, Medical Management."
Burton R. Corbus, M. D., Grand Rapids.
- 3:30—"Disease of the Cervix."
R. S. Cron, M. D., Milwaukee.
- 4:00—Recess.
- 4:10—"Hypertension."
William J. Eagan, M. D., Milwaukee.
- 4:40—"Epilepsy."
John L. Garvey, M. D., Ann Arbor.
- 5:10—"Head Injuries."
Frederick C. Warnshuis, M. D., Grand Rapids.
- Adjournment.

POST-GRADUATE CONFERENCE

Elks Temple, Cheboygan, Mich.

Wednesday, June 9.

B. H. Van Leuven, Councilor-Chairman.

- 12:00—Luncheon—Informal talks.
- 2:00—"Gastric Ulcer, Medical Management."
Burton R. Corbus, M. D., Grand Rapids.
- 2:30—"The General Practitioner's Relationship to Diseases of Genito-Urinary Tract."
Carl Eberbach, M. D., Ann Arbor.
- 3:00—"Some Practical Points in the Handling of Acute and Chronic Nephritis."
George E. McKean, M. D., Detroit.
- 3:30—Recess.
- 3:40—"Diabetes."
Burton R. Corbus, M. D., Grand Rapids.
- 4:10—"Acute Infections of Genito-Urinary Tract."
4:40—"Pneumonia."
Carl Eberbach, M. D., Ann Arbor.
- George E. McKean, Detroit.
- 8:00—Public Meeting Under Auspices of the Parent-Teachers Association, Women's Club and State Medical Society."
Burton R. Corbus, M. D.
George E. McKean, M. D.

PICNICS

The social and fun sides of the doctors life are to be well cared for during this month if all reports are well grounded. Picnics, chicken dinners, beefsteak roasts by the flowing brooks and peaceful lakes of Michigan are part of the activities, probably the most important. There are other factors of interest that challenge the sporting blood of any one. Baseball, golf, bridge, challenges of one Society by another, one profession by another, ministers by doctors, doctors by lawyers, say nothing about the money that is up on either side or who must buy the dinner, are included. Fun is the password for all. Should any one use a medical term in its proper scientific atmosphere he will be fined and may be sent back to practice as punishment. With most of the members of the County Societies an entire year has passed since one fellow practitioner has saluted his fellow by any other term than that of doctor. Here comes the occasion when all the doctors' titles are deleted and in their place come those that are real; John, Jack, George, Frank and all the others.

We are alarmed over what may happen between the Washtenaw and Jackson County Medical Society members. The following letter is printed for the benefit of the membership throughout the state. All cannot be there, but all can do likewise:

To Arms! To Arms! To Arms!
Members of the Washtenaw County Medical Society!!!!

The honor of our Medical Society on the field of combat is at stake. The Jackson County Medical Society, having heard of our annual open air meeting, have flung a

challenge, a whole handful of challenges, at us—golf, horse-shoes, baseball, bridge, and what not. We have taken up this challenge and the rendezvous is the Sylvan Estates Golf Club, between Chelsea and Grass Lake, Thursday afternoon, June the 24th.

These Jackson men are about the cockiest bunch your committee has ever met and they need taking down. The golf tournament starts at 1 p. m., the first foursome teeing off at that time and others as rapidly as possible. Eighteen holes, rules are A. D. Wickett's modification of the Marquis of Queensbury's rules,—honesty first, total each Society's scores, take the average, and the low average wins with the low score of the winning side being the man to keep the cup until next year. The cup is now in the jeweler's being engraved. Ties will be played off.

Their baseball team has won world renown and they have their own umpire, guaranteed to be so crooked that when he dies they'll have to screw him into the ground. Their ancient mariners heave a wicked horseshoe and something has been mentioned in a nasty way about teaching us how to bid a bridge hand. That contest will be for the evening.

Tickets will be sold within the next week or so at \$1.50 per and only those whose 1926 dues are paid will be allowed to qualify for the golf tournament. Your ticket must be stamped "Dues Paid" for your entry.

Golf at 1 p. m., baseball at 5 p. m., swim to cool off (if it ever gets hot), and dinner at 6:30 sharp. Lemonade barrels all along the golf course. Smokes. Quoits all afternoon. Cards after dinner. Strictly stag party. No medical words allowed on the grounds.

Take M-17 to Sylvan Center and watch the red arrows with white crosses for right turn from the pavement and then on to the inn.

Be there!

P.S.—The lemonade barrel will be at the ninth green; if someone leaves a brassie or some other stick in it, that is not our fault.

—For the Committee by a former Washtenaw member now serving in Jackson.

Suggestions very welcome. Call A. D. Wickett, Warren Forsythe or the Secretary.

"BUNK" OR ACCOMPLISHMENT

Someone said that the County Medical Society is another way of saying "Bunk". To that person it was only necessary to present the last two copies of The Journal opened to Society

News. The sceptic there found the reports of twenty-five Secretaries who had recorded the activities of the membership of their respective County Societies. The records include the Scientific meetings, Publicity, Periodic Health Examinations, special meetings for the public on Health Education, and social functions for the membership, a total of 100 activities.

There may be other sceptics in the ranks of the membership of the Michigan State Medical Society who feel that they pay their dues and get little in return. They may feel that they would rather not pay. "I can keep abreast of the advances in Scientific Medicine by going to Chicago or Detroit, Cleveland or the University," say some of them. Let all those who have doubts turn to the above pages of the last two Journals and read the complete reports of the Societies as written by the scribes. It would seem that the knowledge of the work that is being done by County Societies throughout the state would make one feel proud of his fellows, his neighbor Societies, perhaps his own Society, in their accomplishments; proud of his own profession and its accomplishments in the field of science, fellowship for fellow members, civic responsibilities for the community recorded in educational activity and publicity. Before we pronounce judgment upon County Medical Societies and members of our own profession in our own state let us turn to the columns of The Journal and there peruse the various departments. The verdict then will be—The County Society is the base upon which the Profession of Medicine stands in practice and in the advancement of Scientific Medicine. The County Society is then not synonymous with "Bunk" but with "Accomplishment."

COUNTY MEDICAL SOCIETY MEMBERSHIP AXIOMS

1. Be a Member of a County Medical Society. Pay dues yearly and promptly.
2. Serve the Society by supporting the officers and working on Committees.
3. Be a positive member, not negative; constructive, not destructive.
4. Attend County Medical Society Meetings with regularity.
5. Inform laymen in the fundamentals of Scientific Medicine and how to use them intelligently.
6. Have a complete physical examination on your birthday. Educate patients in the value of them for health.
7. Attend Post-Graduate Conferences.
8. Individually advance Scientific Medicine.
9. Serve your community in civic affairs.
10. Be friendly and helpful to fellow practitioners.

County Society News

ALPENA COUNTY

The regular meeting of the Alpena Medical Society was held at Greenbush Inn, Alcona County, Thursday, 20th, 1926. On this occasion the Bay County Medical Society had charge of the program. Twenty-eight members of the Bay County Medical Society with the sixteen members of our Alpena Medical Society, were the guests of Doctors Miller and Lister at a splendid dinner served at 6 o'clock. Following the dinner Dr. R. A. Miller, acting as Chairman for our local Society introduced the speakers of the evening. Dr. Sherman, Bay City, gave an interesting discussion of the effect of local inflammations of the nose as the cause of eye disease. Dr. Allen of Bay City, read a most thoroughly prepared paper on "Paresis." Dr. Hess of Bay City, gave some of the new information regarding diabetes. All of these papers were discussed with interest by the members present. Dr. R. W. Wood of Fairview, who has frequently written for the various medical journals under the caption (From the Jack-Pines), gave a most interesting discussion of the steady advancement of state medicine. He described with some enthusiasm the arduous duties performed by the various surveys sent out by the State Board of Health, amongst which fishing and automobile riding were important.

This was the second of meetings in which the program has been given before our Society by the Bay County Medical Society. These meetings are breaking down the barriers between the members of the different Medical Societies like the meetings of the local Society create harmony among the local members.

The Alpena County Medical Society were the guests of the Chippewa-Mackinac Society at Sault Ste Marie, Tuesday, May 25, 1926. Seven members of our local Society with their wives, enjoyed their hospitality. The following program was given at the Country Club at 4:00 p. m.

Dr. John Purdy, Long Rapids: "Examination of the Chest."

Dr. F. J. O'Donnell, Alpena: "The Acute Abdomen."

Dr. W. B. Newton, Alpena: "Focal Infections and Their Relation to Diseases of the Eye, With Report of Cases."

Following the program the visiting physicians and families were the guests of the Chippewa Society at a dinner at the Country Club.

The evening meeting was held before the Parent-Teacher's Association in the Auditorium of the High School, at which Dr. C. M. Williams spoke on the "Health of the School Child" and Rev. Julian West on the "Moral Health of the Child." The Parent-Teacher's Association at the Soo did not appear to be interested in the subjects and aside from the doctors and their wives present not over a dozen were present. Apparently the Soo people feel that their local physicians have entire mastery of the health conditions of their town.

C. M. Williams, Secretary.

BARRY COUNTY

Our May meeting was a laymen meeting and a very interesting one indeed. The members were almost 100 per cent present. Each one brought his wife along and they served us a delightful pot-luck 6 o'clock dinner.

The speakers of the evening were Superintendent Van Buskirk of our city schools and Dean Eugene Davenport, (Dean and Professor Emeritis, of the

College of Agriculture of University of Illinois), now of Woodland, Mich.

Superintendent Van Buskirk gave us a very interesting talk on the relationship of the profession to the schools. A very interesting discussion was brought about from the fact that some members of the profession have been rather lenient in writing excuses eliminating students from physical educational work which were not always warranted from the student's physical condition.

Dean Davenport's talk struck a key note to the layman's attitude toward the ethics of the profession. I asked him for an abstract of his address which follows:

"The medical profession is to be congratulated upon the progress of the times.

"The greatly improved courses in our medical colleges, the development of science and the greater diffusion of knowledge among the people are doing much to rid the treatment of diseases from its former mystery. To reduce the use of patent medicine and to make the pretensions of the quack more difficult.

"Medical practice had its origin in the medicine man of its tribe. The only one who dared to dispute the word or the authority of the "Old Man," the self-appointed oracle.

"Mystery was the long suit of the medicine man, and mystery was continued. Latin language used in the early schools, and its old tradition that education was to produce a separate and a privileged class.

"It was all bound to the mystery presented by the ethics of the profession which forbade any but the "learned" discussion about disease and a guarded attitude toward the laity.

"Now many laymen know as much about the nature of most diseases and about the functions of the normal body as most physicians and medical men of highest repute in writing in layman's language about matters of health.

"The clinical terms belong to the laboratory, and if a man these days is really educated he can express the most abstract scientific principles in the language of the street. Indeed, our best scientists seldom use the technical terms except before a restricted audience of technicians.

"All this achieves much for rational living and for the reduction of quackery."

BERRIEN COUNTY

The May meeting of the Berrien County Medical Society will be held at the Community House in Niles, Michigan on Wednesday, May 19th.

The program was as follows:

Dinner—6:30 p. m.

Medical Meeting—7:30 p. m.

Dr. Wm. M. LeFevre, Muskegon, Mich., spoke on "Surgical Emergencies of Diabetes."

Dr. George L. LeFevre, Muskegon, Mich., spoke on "The Relation and Benefits of the State Medical Society to the County Medical Society."

Dr. George L. LeFevre is the president of the State Board of Medical Registration and one of the counselors of the State Medical Society and very kindly consented to talk upon this most interesting subject.

If there are any questions that you desire to be enlightened, come prepared to ask them.

CALHOUN COUNTY

The Calhoun County Medical Society held its regular monthly meeting, Tuesday, June 1st, at the Battle Creek Country Club, with the Calhoun County Bar Association as our guests.

Following the dinner and a short business session,

Dr. A. L. Jacobi of Detroit spoke before the combined assembly on "A Psychiatrist and the Court." The subject is a timely one and was handled in a very excellent fashion, the speaker describing many cases from his long list of experiences. Following this there was active discussion by many of the doctors and lawyers present.

This is the first occasion in Calhoun County when the doctors and lawyers have held a joint meeting. It was a great success and we hope to make it a regular occasion once a year.

L. E. Verity, Secretary.

CHIPPEWA-LUCE-MACKINAC COUNTY

On May 25th the Chippewa-Luce-Mackinac County Society had as their guests the Alpena County Medical Society, the latter giving the program.

Dr. John Purdy spoke on the "Examination of Suspected Tuberculosis."

Dr. William Newton read a paper on "Focal Infections and Their Relation to Diseases of the Eye."

Dr. O'Donnell read a paper on "Surgical Conditions of the Abdomen."

Each number on the program was very practical and received with a great deal of interest. We are deeply indebted to the Alpena Society for this splendid program.

After the Scientific Meeting dinner was served to physicians and their guests, at the Country Club.

This was followed by a Public Meeting in the High School Auditorium at which Dr. C. M. Williams spoke on "The Health of the School Child," and Rev. Julian West spoke on "The Moral Health of the School Child." Both these men gave splendid addresses.

On the whole this was one of the best meetings ever held in our Society and was attended by practically every physician in the three counties.

F. C. Bandy, Secretary.

EATON COUNTY

The Eaton County Medical Society held its regular monthly meeting Thursday, April 29th, at the Harriet Chapman Hospital, Eaton Rapids, Michigan.

After a short business meeting, Dr. V. Rickard of Charlotte presented in a very fine manner the subject of "Periodic Health Examinations." This was followed by a very helpful general discussion.

Meeting adjourned after deciding to hold the next meeting in Bellevue.

The Eaton County Medical Society held its regular monthly meeting in Bellevue, Thursday evening, May 27th at 8:00 p. m. in the Baptist church parlors. Fifty per cent of our members were present as well as the Baptist minister and the visiting speaking team from Lansing.

After a short business meeting we came at once to the program which was on the "Medical and Surgical Aspects of Goitre" and was presented to the Society by Dr. Leo Christian and Dr. Wm. McNamara of Lansing.

The following points on the goitre problem were emphasized:

1. Only one type of goitre responds to medical treatment. The rest should be treated surgically, or some by surgical and medical treatment combined.
2. Goitre conditions seem to be on the increase.
3. Treatment of goitre by different forms of iodine is being greatly abused by the laymen and dangerous toxic conditions produced thereby.
4. Goitre treatment should always be guarded and supervised by a competent physician.

5. Neglected goitres all produce heart and kidney trouble later in life. High blood pressure is also commonly caused by these long standing goitres, even though small.

6. "Americanitis" or our strenuous present day way of living is undoubtedly a factor in goitre etiology.

H. J. Prall, Secretary.

GRATIOT-ISABELLA-CLARE COUNTY

The June meeting of the G. I. C. was held in Alma City Hall Thursday, June 10th. Neither President Graham or Vice President Kilborn being present, Dr. R. B. Smith was called to the chair.

The Secretary read a short history of the Gratiot and the Gratiot-Isabella-Clare County Medical Society, that he had prepared at the request of State Secretary Warnshuis. Some corrections and additions were suggested after which the history was accepted.

Our out of town speaker was Dr. I. W. Greene of Owosso. Subject: "Clinical Types of Hypothyroidism." This subject proved interesting, those present asking many questions of the doctor after he finished his paper.

E. M. Highfield, Secretary.

ISABELLA COUNTY

The first permanent Medical Society in Isabella County was organized in 1899, previous attempts always miscarrying. The first President was Peter E. Richmond, M. D.; the first Secretary being Sheridan E. Gardiner, M. D. Later Clare County came into this Society, thus forming the Isabella-Clare County Medical Society, the largest membership attained being 21. The office of President changed nearly every year, but the same Secretary served for 15 years, being succeeded by C. M. Baskerville, M. D. The meetings were held quarterly, usually in Mount Pleasant, but sometimes in Shepherd and Clare.

Some very interesting and profitable meetings were held, the papers being usually by members in the Society but sometimes by physicians from some of the larger surrounding cities. This Society did much good in bringing about a friendlier feeling among the members and it also assisted materially in the collection of accounts.

Believing that larger and more frequent meetings would be desirable, in 1915, this Society merged with Gratiot Medical Society, forming the Gratiot-Isabella-Clare County Medical Society, known as the G. I. C. Medical Society.

HILLSDALE COUNTY

The joint meeting of the Medical Societies of the Counties of St. Joseph, Branch and Hillsdale was held at the Country Club, Hillsdale, June 16th at 6:00 p.m., the President, Dr. J. H. Johnson, in the chair.

After a dinner and the reading of the minutes, Dr. Sawyer at the request of the President, introduced the speaker of the evening, Dr. Udo J. Wile of the University of Michigan, who gave a splendid address on "Peculiarities and Treatment of Syphilis." Much of the information given was new and almost revolutionary, especially in his use of the Wassermann and Kahn lists in diagnosis.

Dr. Wile's magnificent address was followed by general discussion, in which he answered a number of questions.

In summing up, he stressed the importance, 1st of early and thorough treatment, 2nd, watching the clinical conditions in old cases and giving treatment accordingly.

After the address, the Society took up the subject of the sad death of Dr. Bell of Reading, and ordered

the Secretary publish the following sketch of his life and work and the appended resolution in The Journal of the State Medical Society, to inscribe them in the records of the County Society and to transmit a copy of the resolution to Dr. Bell's family.

IN MEMORY

Dr. Thomas H. E. Bell was born in Auburn, Huron County, Canada, June 18th, 1874 and died at his home in Reading, Michigan, June 7th, 1926.

He was the son of Joseph and Mary (Hawson) Bell who were Canadians by birth, the former of English and the latter of Scottish descent. Losing his mother when he was only four years old, he was reared by an uncle, Mr. John Lasham of Londesborough in his native county. He was educated in the public schools of that county, graduating from the Clinton High School in 1892. He then took up the study of medicine and was graduated from the Michigan College of Medicine and Surgery at Detroit in 1897; later, taking a post-graduate course at the New York Polyclinic.

Immediately after his graduation he located for the practice of his profession at Montgomery, Michigan. Here, his skill as a physician and surgeon and his attractive and forceful personality, soon brought him an extensive practice throughout the county and in the adjoining states of Ohio and Indiana.

In 1898 he was married to Miss Anna M. Webb of Staffa, Ontario, who with one son, Kenneth, survives him.

In 1912 the family moved to Reading, Michigan, where he had built a beautiful home.

Dr. Bell served during the world war at the Base Hospital at Chillicothe, Ohio. Entering the service as captain, he was recommended for promotion to the rank of major, but declined that honor, preferring to return home and resume his private practice. His severe and exhausting duties in the service impaired his health and undoubtedly contributed in large measure to his physical breakdown.

Dr. Bell was an active member of the Hillsdale County Medical Society and had served as its President and as Delegate to the State Society, of which he was also a member, as he was of the American Medical Association.

In addition to these professional honors, he served three terms as President of his home town and always worked for its best advancement.

He was a member of the O.E.S., the Odd Fellows, Knights of Pythias, Elks, and was a Knight Templar and a Shriner.

Dr. Bell's devotion to the exacting duties of his high calling, his wide charity and sympathy to rich and poor alike, his honor and fairness, and his cheerful and genial presence made him universally beloved by those he served and no less so by his colleagues in the medical profession.

His untimely death is a tragedy which has cast a gloom over the entire community and which we mourn and cannot understand. We simply bow to the inevitable.

The death of Dr. T. H. E. Bell has thrown a pall of sorrow and bereavement over the community which he loved and which loved, respected and trusted him, and for which he made the Supreme Sacrifice.

Cut down in the zenith of his strength and usefulness, his place cannot be filled in the hearts of his people. Service before self was his purpose and reality.

To us, his professional brothers, he was a friend and comrade. Careful in his ethical relationship, and tolerant of the mistakes of others, he constantly strove to improve his own work and to contribute to the betterment of all. Interestedly and willingly, he generously gave of his time and of himself to conserve the public health and the welfare of his profession.

His loss to us we cannot appraise. "We shall meet but we shall miss him; There will be one vacant chair."

BE IT RESOLVED, That we extend to his grief stricken family our sympathy in this sad hour of our mutual sorrow.

Committee,

Dr. W. H. Sawyer,
Dr. B. F. Green,
Dr. C. T. Bower.

A message of thanks from Mrs. Bell and her son to the members of the County Medical Society for their sympathy and help during Dr. Bell's illness and after his death was then read after which the Society adjourned.

J. H. Johnson, President,
D. W. Fenton, Sec'y-Treas.

JACKSON COUNTY

The May meeting of the Jackson County Medical Society, held at Foot Hospital, May 18, was addressed by Dr. John B. Jackson, Councillor of the 4th District, who spoke on "Periodic Health Examination."

After a brief review of Preventive Medicine, mentioning Jenner, Pasteur, Koch, and VonBehring, Dr. Jackson mentioned malaria, typhus, yellow fever and bubonic plague as diseases nearly eliminated by Public Health Work. He said the present day effort is to prevent disease in the individual. In the future, the work of the medical man will be preventive. This is to be done by regular examinations of the apparently healthy.

He used the example of the automobile worth a thousand dollars which is regularly inspected overhauled, the owner does not wait until the car is wrecked. Draft Board Examinations showed one-third of the examined men unfit for service due to defective vision, hearing, teeth, rheumatic heart, goitre, and hernia, practically all preventative troubles.

In reviewing the A.M.A. examination blank, Dr. Jackson stressed the following points, personal hygiene such as sleeping, smoking, drinking, eating, exercising and elimination as very important in history taking. Most of us eat too much and exercise too little. Underweight below thirty and overweight above, were stressed as being particularly bad.

Familial tendencies, or so-called inherited diseases, might often be warded off by careful and repeated examinations. Many diseases of later life are due to foci of infection, especially dead teeth, pyorrhea, impacted teeth, and infected tonsils, readily discovered on a physical examination.

Due to inclement weather there were only thirty-four doctors present at the meeting, all of whom had within the past year had a complete physical examination of themselves. A manual on periodic examinations was given to each physician present.

The next meeting will be held June 24 at Sylvan Estate Country Club, Jackson County joining with Washtenaw County.

POST GRADUATE CONFERENCE

On May 25, 1926, the Second District of the Michigan State Medical Society held a Post-Graduate Conference at the City Club in Jackson.

The doctors attending the conference were invited to attend the Civic Luncheon sponsored by the Chamber of Commerce and the luncheon clubs, at which time they were addressed by Royal S. Copeland, M. D., United States Senator from New York. Following the luncheon, Dr. Copeland gave a talk to the conference lauding the profession and its work.

Owing to sickness Dr. D. M. Cowie of Ann Arbor was unable to give his talk on "The Gastro-Intestinal Gradient." Dr. Plinn F. Morse of Detroit, who was to have talked on "Diseases of the Liver" and "Blood

Vessels and Blood Vessel Accidents" was also unavoidably absent.

There were 94 doctors who sent in reservations for luncheon, but only 78 registered in the conference room.

D. Burr Marsh, Secretary

LENAWEE COUNTY

The May meeting was held on Thursday the 27th, at Tecumseh. The Monroe County Medical Society was invited and was represented by a large percentage of their membership.

An excellent chicken dinner was served to over thirty members from the two counties at the Evans restaurant.

The scientific meeting was held upstairs over the restaurant. In the absence of our President, who is abroad, the meeting was called to order by Vice President S. J. Rubley. Regular routine Society business was carried over until next meeting in June and the speaker of the evening, Dr. H. A. Reye of Detroit was introduced. The subject of his talk was, "The Practical Management of the Neurosis." Dr. Reye presented his subject in his characteristic vivid and dramatic manner, illustrating clearly with a number of case histories of the various types of neurosis and allied conditions found in everyday practice.

An example of the interest shown by his audience may be given by the remark made by one of those present. After talking for almost an hour, Dr. Reye stopped and asked if he had talked too long. Some one spoke up and said he had only talked 15 minutes and to continue.

Monroe County joins with Lenawee in extending their sincere thanks and appreciation to Dr. Reye for coming out to meet with us.

The next meeting of Lenawee County Medical Society will be on or about June 24th with a picnic at the cottage of Dr. L. J. Stafford.

R. G. B. Marsh, Secretary.

OTTAWA COUNTY

The Ottawa County Medical Society held its regular monthly meeting and luncheon at the Warm Friend Tavern in Holland on May 18th. There were 19 members and 25 guests present. The guests were from Holland's business and professional men. Mr. Wyand Wichers, cashier of the First State Bank, spoke to us on "Mr. M. D., Scientist, Friend and Human."

On June 8th the Society met in regular session with a luncheon at the M. E. Church in Grand Haven. Attorney Chas. E. Wisner, of Grand Haven, addressed the Society on "Crime and Its Cure." Fifteen members were present. The meetings will now be discontinued until September.

A. Van der Velde, Secretary.

Among the Books—Continued

(Continued from Page 347)

COLLECTED PAPERS BY THE STAFF OF HENRY FORD HOSPITAL, 1915-1925. Cloth, 665 pages. Price, \$8.00. Paul B. Hoeber, Inc., New York.

This publication represents the scientific writings by the members of the staff of this hospital and covers the years of 1915 to 1925. The majority of the papers have appeared in various medical publications.

On careful perusal of the volume the opinion is promptly formed that this is an excellent addition to our medical literature. It will enable the general prac-

titioner as well as the specialist to obtain much that is of practical value as well as scientific value in his daily practice. It is set forth on the practical applications of the principles that are discussed. We recommend this addition to our medical literature and are pleased to learn that it is planned to continue the series thus started with subsequent volumes from time to time.

BI-POLAR THEORY OF LIVING PROCESSES: George W. Crile, M. D. Cloth, 405 pages. The MacMillan Company, New York.

This volume presents an attempt to present certain conclusions which are based upon research conducted by the author. The progress of these studies and the development of the theory are summarized. As such the text and the experiences of the author form interesting premises for scientific conjecture.

THE MEDICAL CLINICS OF NORTH AMERICA (Issued serially, one number every other month.) Volume IX, Number V, (Chicago Number, March, 1926.) Octavo of 206 pages with 34 illustrations. Per Clinic year, July, 1925, to May, 1926. Paper, \$12.00; Cloth, \$16.00 net. W. B. Saunders Company, Philadelphia and London.

THE MEDICAL CLINICS OF NORTH AMERICA, (Issued serially, one number every other month.) Volume IX, Number VI, (Chicago Number, May, 1926.) Octavo of 202 pages including complete Index to Volume IX, with 24 illustrations. Per Clinic year, July 1925 to May, 1926. Paper, \$12.00; Cloth, \$16.00 net. W. B. Saunders Company, Philadelphia and London.

THE SURGICAL CLINICS OF NORTH AMERICA, (Issued serially, one number every other month.) Volume VI, Number II (San Francisco Number—April, 1926.) 250 pages with 73 illustrations. Per Clinic year, (February, 1926, to December, 1926.) Paper, \$12.00; Cloth, \$16.00 net. W. B. Saunders Company, Philadelphia and London.

These three issues maintain the high standard that has long been established by these clinics.

1925 COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION, Rochester, Minnesota. Octavo of 1078 pages, 252 illustrations. Cloth \$13.00 net. W. B. Saunders Company, Philadelphia and London.

Volume 17 of the Collected Papers of the Mayo Clinic are now available. It maintains its former standard and imparts progress of the scientific work that is being accomplished at this time. Every practitioner and surgeon will find this volume to be extremely helpful in a truly Post-Graduate course of clinical reading and study.

A MANUAL OF NORMAL PHYSICAL SIGNS: W. B. Blanton, M. D. Cloth, 205 pages. Price, \$2.50. C. V. Mosby & Co., St. Louis, Missouri.

This is an excellent manual for students and internes as well as a guide for others conducting physical examinations and as such is commended to the Profession.

RELATION OF ANAPHYLAXIS TO IMMUNITY

One of the debated questions in immunology is the relation of acquired hypersusceptibility to acquired immunity. W. H. Wanwaring, Ralph W. Wright and Phil W. Shumaker, Stanford University, Calif. (*Journal A. M. A.*, April 24, 1926), thought to throw light on this question by studying the relationship between the sensitizing antibody and the immune antibodies in the dog, an animal not yet used in such comparisons. They found that the difference between the sensitizing antibody and the immune antibody is not merely a quantitative one. The two antibodies apparently have wholly different physiological properties.